

JPRS 82567

30 December 1982

USSR Report

HUMAN RESOURCES

No. 72



FOREIGN BROADCAST INFORMATION SERVICE

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service (NTIS), Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semimonthly by the NTIS, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

Soviet books and journal articles displaying a copyright notice are reproduced and sold by NTIS with permission of the copyright agency of the Soviet Union. Permission for further reproduction must be obtained from copyright owner.

30 December 1982

USSR REPORT HUMAN RESOURCES

No. 72

CONTENTS

LABOR

Yelyutin Outlines Training Plans To Aid Food Program (V. P. Yelyutin; VESTNIK VYSSHEY SHKOLY, Sep 82).....	1
Bachurin Focuses on Labor Problems (A. Bachurin; SOTSIALISTICHESKIY TRUD, Aug 82).....	13
Impact of Technology on Labor Weighed (Ye. A. Soboleva; VESTNIK MOSKOVSKOGO UNIVERSITETA— EKONOMIKA, Jul.-Aug 82).....	27
Professionals Comment on Retiree Employment Problems (SOVETSKAYA ROSSIYA, 23 Oct 82, PRAVDA, 18 Oct 82).....	38
Work of Retirees Discussed, by A. Chapaykin Minister Discusses Retiree Employment, by M. Kazyev	
Worker Participation in Socialist Society Viewed (N. Krayeva; EKONOMICHESKIYE NAUKI, Oct 82).....	47

LABOR

YELYUTIN OUTLINES TRAINING PLANS TO AID FOOD PROGRAM

Moscow VESTNIK VYSSHEY SHKOLY in Russian No 9, Sep 82 pp 3-11

[Article by V. P. Yelyutin, corresponding member of the USSR Academy of Sciences, USSR minister of higher and secondary specialized education: "The Food Program and Tasks of Higher Education"]

[Text] The May (1982) Plenum of the CPSU Central Committee will go down in the history of the party and the country as a major event in the development and implementation of the Marxist-Leninist agrarian policy. The documents of the Plenum and the speech there by General Secretary of the CPSU Central Committee Comrade L. I. Brezhnev, "On the USSR Food Program for the Period Up To 1990 and Measures for its Implementation," constitute a large contribution to the theory of scientific communism and the practice of party leadership of soci-economic construction. Clearly pointing out the paths of the development of the country's agro-industrial complex, the plenum's decisions arm party organizations and all labor collectives with reliable, scientifically substantiated guidance toward the implementation of our party's policy for improving the well-being and satisfying the vital demands of the soviet people.

The Food Program adopted by the plenum, which is a constituent part of our party's economic strategy in the period of developed socialism, was drawn up in keeping with the decisions of the 26th CPSU Congress, on the initiative and under the personal guidance of Comrade L. I. Brezhnev. Making the long-term aims of the Congress and the party's economic strategy and social policy for the 1980's more specific, the documents of the Plenum rely on scientific analysis of the paths of development of the agro-industrial complex which was carried out by the country's central institutions with the participation of scientists and specialists. They have also taken into account the suggestions of the central committees of the communist parties and councils of ministers of the union republics, obkoms, oblispolkoms, raykoms and rayispolkoms, materials from the press and letters from workers. This makes it incumbent on us to regard the decisions of the plenum as the result of the collective reasoning of the party which combines the force of scientific foresight with consistent accounting for the vital interests of the broad masses.

The program earmarked by the plenum is based on those results that were achieved during the course of the implementation of the party's agrarian policy during the period beginning in March 1965. During these years the

material and technical base of agriculture was qualitatively renewed and profound changes were made in the conditions for the life and labor of the soviet peasantry. This provided for a significant increase in the volumes of production of agricultural products, whose growth rates have regularly outpaced the growth of the population. Suffice it to say that during the 15 years the per capita consumption of meat and meat products increased by 41 percent, milk and dairy products--by 25 percent, eggs--almost 2-fold, vegetables--by 35 percent, vegetable oil--by 24 percent and sugar--by 30 percent.

"And nonetheless," said Comrade L. I. Brezhnev at the plenum, "we cannot be satisfied with what has been achieved, we cannot but see that the food problem is far from being removed from the agenda."

Relying on a profound analysis of the reasons why agricultural production is lagging behind the growing needs of the country, the Politburo of the CPSU Central Committee considered it necessary to develop the Food Program, whose preparation and implementation Comrade L. I. Brezhnev described as a "principally new step in the system of our planning and in the administration of the socialist economy."

The goal of the program is to take advantage of the country's increased economic potential in order to provide as quickly as possible for continuous supply of the population with all kinds of food products and to essentially improve the structure of nutrition as a result of the consumption of the more valuable products. The program embodies a special-purpose, comprehensive approach to solving the food problem. It makes it possible to coordinate and unify the work both of agriculture itself and of the branches of industry, transportation and trade that serve it, subordinating all their activity to a single final goal--the production of high-quality food products and the delivery of these to the consumer.

In addition to the Food Program, as we know, the plenum enacted a number of decrees of the CPSU Central Committee and the USSR Council of Ministers regarding several specific issues. They include: the decree on improving administration of agriculture and other branches of the agro-industrial complex; on measures for improving the economic mechanism and strengthening the economies of the kolkhozes and sovkhozes; on measures for increasing the material motivation of agricultural workers to increase the production of products and improve their quality; on additional measures for reinforcing workers employed in animal husbandry on the kolkhozes, sovkhozes and other agricultural enterprises; on measures for further improving housing, municipal-domestic and socio-cultural conditions for the life of the rural population; and on further strengthening management personnel and specialists on the kolkhozes and sovkhozes and increasing their role and responsibility in the development of agricultural production. These decrees comprise a firm organizational, economic, social and personnel base for carrying out the assignments of the Food Program.

A special place in this program is allotted to tasks of soviet scientists who are called upon to provide for a considerable acceleration of the rates of scientific and technical progress in branches of the agro-industrial complex.

There will be further development of the network of scientific production associations that concentrate on the production of varietal seeds and planting material of the highest reproductions as well as the propagation of breeding livestock. Economic research is being directed toward recommendations for further improvement of specialization, concentration and interfarm cooperation of agricultural production and the introduction of progressive forms of organization and stimulation of labor. It is intended to increase selection work for isolating new strains and hybrids of agricultural crops, and new breeds of livestock and poultry that are suitable for industrial technology in crop growing and animal husbandry. The orientation toward a systematic technological approach also distinguishes the assignments of the Food Program that pertain to research in the area of agronomy, feed production, veterinary medicine, storage and processing of agricultural products and efficient utilization of water resources. The academies of sciences of the USSR and the union republics and also VASKhNIL have been instructed to develop theoretical and applied research on problems of genetic engineering, the selection of plants, micro-organisms and animals, and the biotechnology for the synthesis of protein and biologically active substances. Thus soviet scientists, and this means scientists of the higher school, are called upon to play an active role in the implementation of practically all the tasks arising from the Food Program, keeping in mind that the integration of science and production is regarded in it as one of the leading factors in accelerated development of agriculture and branches related to it.

The party plans that are embodied in the Food Program rely on the immense personnel and intellectual potential created in the country's agro-industrial complex when determining the role of higher and secondary specialized schools.

Implementing the historic decisions of the March (1965) Plenum of the CPSU Central Committee, the VUZ's and tekhnikums have essentially expanded the training of personnel for branches that determine the development of agricultural production. During the past period the number of specialists employed directly in the agrarian sector of the economy has increased almost 3-fold and is now approaching 1.9 million. As a result it has been possible to essentially increase the number of personnel with higher and secondary specialized education in the leading areas of agricultural production. While in 1965 for every 1,000 workers on kolkhozes, sovkhoses and other agricultural enterprises there were 22 specialists, now there are more than 70. Now practically all managers of farms and head specialists have a higher or secondary specialized education. We have provided for planned placement of highly skilled personnel in the main branches of industry that serve agriculture--microbiology, chemistry, land reclamation and water management, agricultural machine building and so forth. Now more than 400 higher and 1,000 secondary specialized training institutions prepare specialists for the agro-industrial complex; each year they send 540,000 of their graduates to this sector. A leading role in the implementation of the agrarian policy is played by higher and secondary educational institutions of an agricultural profile which comprise a powerful and highly developed system of training and training-scientific centers. More than 545,000 students are studying in 104 agricultural VUZ's; every 10th graduate of the higher schools graduates from an agricultural VUZ. Almost 780,000 people are studying in 664 tekhnikums of this profile and the annual graduating class of these training institutions exceeds 200,000 people; this is more than 16 percent of the overall number of graduating specialists from tekhnikums and schools in the entire country.

The scope of the training of personnel for the agro-industrial complex that has been achieved corresponds on the whole to the tasks for its accelerated development. Nonetheless agriculture and branches related to it are continuing to experience an appreciable shortage of specialists. And the main reason for this consists in that many graduates of VUZ's are not assigned to work in the sphere of agricultural production. Approximately one-third of them (and among graduates of tekhnikums even 40 percent) do not show up to work at the place assigned by the state or else they leave this job within the first year.

The irregular distribution of specialists among the various branches and spheres of occupational activity presents a serious problem. While enterprises of agricultural machine building and Sel'khoztekhnika organizations are in a relatively favorable position in this respect, in the leading units of agricultural production itself the shortage of skilled personnel, especially at the middle level, continues to be extremely critical. In this connection it is appropriate to recall that in his speech at the festivities in Tashkent, Comrade L. I. Brezhnev especially noted the following: Less than half of the specialists of an agricultural profile are employed directly on the kolkhozes and sovkhozes. At the same time every tenth agronomist and more than one-third of the engineers, technicians and machine operators on the sovkhozes do not have a higher or secondary specialized education. A similar situation is found in many organizations of rural construction and land reclamation. The administrative staff where a considerable part of the highly skilled personnel are concentrated is unjustifiably large.

The party and government have attentively considered ways of more fully providing the agro-industrial complex with personnel. Practical measures in this area were earmarked in the decree, "On Further Assigning Management Personnel and Specialists to Kolkhozes and Sovkhozes and Increasing Their Role and Responsibility in the Development of Agricultural Production."

Like all the documents of the May plenum, this decree is comprehensive, embracing all the main aspects of work with management personnel and specialists. It considers effective steps toward eliminating disproportions in the distribution of personnel among the spheres of occupational activity and also to assigning and utilizing them better in rural areas. One can say with complete justification that the organizational, economic and social measures envisioned in the decree will lay a firm basis for increasing the final national economic results of the activity of the VUZ's and tekhnikums for forming the personnel potential of modern Soviet rural areas. As for the higher and secondary specialized schools themselves, they are faced with the following main tasks.

First, in order to more fully provide sovkhozes, kolkhozes and other enterprises with engineers, veterinarians and bookkeepers, it has been recognized as necessary to expand their training, above all in training institutions of the nonchernozem zone and the central chernozem region of the RSFSR, and also in Siberia, Northern Kazakhstan, and the Far East. It is intended to increase the graduating classes of specialists without going beyond the limits of the overall plans for the admission of students into VUZ's and tekhnikums during 1982-1985. The USSR Ministry of Higher and Secondary Specialized Education,

in close cooperation with the USSR Ministry of Agriculture, will have not only to determine with extreme precision the specific training institutions and specialties in which it is necessary to expand the training of personnel, but also to search out reserves and possibilities of maneuvering contingents of students--redistributing them without causing harm to those regions where it will be necessary to reduce the number of specialists who are graduated.

Second, in the interest of expanding the training of specialists who are representatives of rural youth, the decree of the party and government has permitted the admission to training divisions of agricultural VUZ's those graduates of general educational schools who are members of production brigades but do not have a year's work experience. At the same time it pointed out the need to send more rural youth for training in VUZ's with the payment of stipends from the farm funds.

In order to carry out these directives of the party and government it is necessary to conduct all the work for enrolling leading youth in training institutions in conjunction with the kolkhozes and sovkhoses, the rural schools and the Komsomol organizations. To do this it is necessary to maintain stable ties with farm managers, party and soviet agencies and the rural teaching profession and, of course, to maintain constant communication with rural youth themselves. The VUZ's and tekhnikums can do a great deal to make sure that these youth see an attractive reference point for their lives in continuing education in the area of agricultural science and practice, regarding this as the main school for fruitful labor in their native land.

Third, in order to improve the assignment of personnel to the kolkhozes and sovkhoses, the party and government have extended certain privileges to graduates of higher and secondary agricultural training institutions--apartments with rent, lights and heat free of charge, and stipends for domestic necessities. At the same time it has been recognized as necessary to raise the level of wages for managers and specialists and increase their material incentives. These measures will help the VUZ's and tekhnikums to make sure that all graduates go to the places where they are assigned. It is even more important to improve more actively the organization of the distribution of young specialists: this organization should take into account the priorities of the kolkhozes, sovkhoses and other agricultural enterprises in securing personnel. The VUZ's should attentively analyze this state of affairs and think of effective ways of applying additional new measures.

Fourth, the decree under consideration sets the task of providing for further improvement of retraining and improving the skills of management personnel and specialists of agricultural enterprises. Specifically, we are speaking about improving the activity of divisions for training management personnel and schools for administration of agriculture. It is also necessary to increase the demands when selecting students for these training subdivisions and increase the role of the higher school of agricultural administration which provides methodological guidance for increasing the skills of managers and specialists of agrarian production. In this connection it is necessary to attentively analyze the organization of improving skills in other branches of the agro-industrial complex as well, having determined ways of switching it over to the "rails" of the Food Program.

Fifth, the decree assigns an important position to further assigning highly skilled teaching personnel to agricultural training institutions and to improving the living conditions and medical and cultural-domestic services for students, trainees, auditors and teachers. In carrying out this instruction from the party and government, major attention should be concentrated on unsolved problems. It is no secret, in particular, that agricultural VUZ's have an unjustifiably high turnover of rectors, they have not arranged for the formation of a stable reserve of personnel for advancement, and in many of them it is difficult to raise the level of teaching because of the poor qualitative make-up of instructors of social sciences and fundamental disciplines. Considerable difficulties are experienced in staffing pedagogical collectives of secondary specialized training institutions that are located in rural areas, including sovkhoz-tekhnikums, which in the future should play a leading role in training middle level personnel. This is why in this area as in other areas of fulfillment of the Food Program it is necessary to take a comprehensive approach, to be able to see the problem as a whole and to be persistent in solving it.

In addition to specific immediate and long-range tasks set for the VUZ's by the Food Program, it contains a number of general directives having to do with principle whose implementation determines ways of improving the entire system of planned administration of training and distribution of specialists.

First of all one should mention the changeover that is being carried out in keeping with the program to the administration of the agro-industrial complex as a unified whole and the restructuring of the management of its development from interbranch and special-purpose positions. In the final analysis this means a similar restructuring of the planning of the training of specialists which should also be carried out from broader interbranch positions. Even today it is necessary to be thinking of ways and forms of this integration of planning, to generalize data about the need for personnel in various branches of the agrarian complex, and to reveal and clearly determine its object of administration--VUZ's, tekhnikums and their specialties which are related to the implementation of the Food Program.

Another, no less important facet of the changes in the practice of planned administration is the stable establishment of the method of special-purpose programs here. A certain amount of experience has already been accumulated in this area. We are speaking about the organization of the training of personnel on the basis of orders and decisions of the board which are made by the USSR Ministry of VUZ's in conjunction with branch ministries and departments. Such an order was recently issued with respect to one of the branches of the agro-industrial complex--it was issued by the USSR Ministry of VUZ's and the Ministry of the Food Industry. It is necessary to force the development and implementation of joint decisions with other ministries and departments that provide for the fulfillment of the Food Program.

The pivotal point of special-purpose planning is orientation toward final results. Under the conditions of planned administration of the training of specialists, success is determined by the precision of the personnel order and the efficiency in the organization of the distribution of specialists. In

this connection it is necessary to achieve accelerated practical implementation of two mutually augmenting tasks: to provide for the application of modern methods of determining the need for specialists in the branches of the agro-industrial complex and to accelerate the changeover to more rapid distribution of graduates of the corresponding VUZ's.

A comprehensive, special-purpose approach to providing personnel for the agro-industrial complex also presupposes further improvement of the network of training institutions and giving them more distinct profiles; more efficient distribution of specialties and specializations; and a better ratio between day, evening and correspondence forms of training. It will be necessary to expand special-purpose training of personnel for those regions where there are no agricultural training institutions; to continue the development and strengthening of sovkhos-tekhnikums; to utilize more actively the possibilities of alternating in-person and correspondence education of students and trainees, taking into account the seasonal nature of work in agriculture; to create favorable conditions for more extensive enlistment of workers of enterprises and organizations of the agrarian sector in the system of education without leave from production. Special attention should be given to promptly providing specialists for the dynamically developing social infrastructure of the modern rural areas. In a word, the Food Program makes it necessary to optimize in all ways the system, methods and practice of planned administration of training of specialists, to increase the national economic efficiency and to improve the final results of the activity of VUZ's, tekhnikums and schools.

The requirements of economic practice for skilled specialists, one of the leading factors in increasing production, are also increasing essentially.

In recent years, especially since the July (1978) Plenum of the CPSU Central Committee, a good deal has been done to improve education in the specialties of agriculture and the branches related to it. But even though the standard training and methodological documentation has been updated along with the development of the agro-industrial complex, the quality of teaching is not improving as rapidly as modern production requires. This is why we are now faced with a two-fold task. On the one hand it is necessary to purposively improve the content of standard training plans and programs, reflecting more fully in them the prospects for scientific and technical progress in agrarian production; on the other, it is necessary to step up control over the training process, helping the VUZ's and tekhnikums to raise the quality of teaching to the level of the new requirements.

It will be important to revise the list of specialties and specializations from which personnel are trained for the agro-industrial branches. During the course of this work it will be necessary not only to reveal the need for the creation of new specialties, but also to determine ways of optimizing the training of personnel, proceeding from the occupational and qualificational structure of workers in the branches of the agro-industrial complex.

The development of the descriptions of skills for agro-industrial specialties has already been completed and training plans have been prepared for approval, taking into account modern tendencies in the development of the training process. The technological orientation in education has been retained here and more attention has been given to planning independent studies and the arrangement of practical training of the students. But still it is necessary, as scientists and specialists are enlisted, to look once again into the structure of the new training plans and to revise the composition and volume of disciplines included in them from the standpoint of the Food Program. For example, even today it is clear that in keeping with the decisions of the May (1982) Plenum, the economic and administrative training of personnel should be revised; it should reflect the new system of administration of the agro-industrial complex and measures taken for improving the economic mechanism. It is necessary to determine whether structural changes should be made in the training plans or whether it is necessary to concentrate efforts on revising training programs and publishing new training literature.

Those aspects of improving the content of personnel training that are related to solving problems of comprehensive mechanization of production processes in farming and animal husbandry should be the object of special attention. Here we are speaking not only about specialties that are directly oriented toward agriculture (such, say, as agricultural machine building), but also about adjacent areas, for example, engine and automotive machine building. It is necessary to reach a point where the students in these specialties have mastered the knowledge required for optimizing engineering decisions in the process of the creation of agricultural equipment and can take into account the peculiarities of its operation.

A similar approach is necessary in the matter of improving the training of specialists in the area of chemization of agriculture. And here one must not think only about agronomists and agrochemists. It is very important to deal more extensively with questions of utilizing the achievements of chemistry in agricultural production in university courses for the specialties "biology" and "soil science"; a profound knowledge of these should be provided in chemical and technological VUZ's. We must improve the training of machine builders for industries that produce mineral fertilizers and microbiological products. Here special attention should be devoted to questions of creating technological lines and sets of equipment with large unit capacities and closed technological and energy cycles. In a word, the interbranch nature of the Food Program requires a comprehensive approach to improving the content of education in all specialties where personnel are trained for the agricultural industry.

In his report at the plenum Comrade L. I. Brezhnev emphasized that in the 1980's a major step should be taken in the matter of social restructuring of rural areas and elimination of the social differences between the city and the country. This must also be taken into account in training personnel whose labor will determine the social and cultural image and the entire way of life of the rural population--we have in mind teachers, physicians, and specialists in the areas of physical education and sports, club matters and domestic services. The decree of the CPSU Central Committee and the USSR Council of

Ministers, "On Measures for Further Improvement of Housing, Municipal-Domestic and Socio-Cultural Conditions for the Life of the Rural Population," expands the possibilities of the higher and secondary specialized schools for training personnel of the indicated profile from rural use and also envisions additional measures for assigning young specialists in rural areas. The collectives of training institutions are directly responsible for taking advantage of these possibilities with a maximum return, and fuller satisfaction of the needs of rural areas for personnel should be combined with a rise in their ideological and vocational level.

Finally, the USSR Ministry of VUZ's has earmarked measures directed toward strengthening the training and methodological guidance of the practical preparation of specialists in the agrarian profile. In particular, it is planned to develop all-encompassing programs for production practice and to carry out this practice in the form of specialized brigades of animal husbandry workers, field workers and machine operators. It is also intended to increase the role of training farms in the inculcation in future specialists of skills of production organizers and educators of labor collectives. Of course, the actual significance of these measures will depend largely on the degree of development of ties between VUZ's and *tekhnikum*s on the one hand and enterprises and organizations on the other, and how well we can arrange the cooperation of training institutions and production in the preparation of specialists.

The Food Program is an ideological document of great sociopolitical significance which reveals the tasks and means of educating soviet workers in the spirit of the struggle for unwaivering implementation of the CPSU socio-economic strategy.

Therefore it is necessary to continue an in-depth study of the decisions of the May (1982) Plenum in all collectives of training institutions. The corresponding questions should become a constituent part of the courses in social sciences; they should be reflected in the teaching of the general occupational and special disciplines and in the comprehensive plan for educational work during the entire training period. And, of course, future specialists must acquire personal experience in shock labor, participating in agricultural work and in the activity of student detachments. To provide for full-value utilization of the ideological potential of the decisions of the May Plenum in order to improve the ideological and political, labor and moral education of the youth who are being educated--such is the task set for us by the party.

A major area in the education of specialists for the agro-industrial complex should be to instill in them a love for their occupation; it is necessary to reach a point where each student is profoundly aware of his occupational and social duty. The ties of agricultural specialists with the land, with live nature, and the noble nature of the labor that is directed toward the creation of the most important vital goods, toward the preservation and multiplication of natural riches--all these factors should be purposively and effectively utilized in the matter of communist education of students and trainees.

In his report at the plenum, Comrade L. I. Brezhnev pointed out that one should place immediate tasks at the center of the work for implementing the Food Program and reach a point where their resolution will make it possible even

this year to obtain appreciable national economic results. It is precisely from this standpoint that many VUZ's have approached the organization of the activity of student brigades at facilities of the agro-industrial complex, where more than a half million future specialists worked during summer vacation. In keeping with the decree of the CPSU Central Committee and the USSR Council of Ministers, "On Additional Measures for Providing for the Harvesting of the Crops, the Procurement of Agricultural Products in 1982 and Successful Wintering of Livestock During the 1982/82 Period," this autumn the VUZ's and tekhnikums have sent a large detachment of future specialists to the kolkhozes and sovkhozes.

It is necessary to reach a point where the labor of the youth who are being trained produces a maximum advantage and serves to instill patriotic feelings. Unwaivering concern should be shown for the creation of favorable housing and living conditions for those participating in agriculture work and, on the other hand, the schedule of the training process should be intelligently adjusted.

During the current decade the higher and secondary specializes schools will send more than 3.5 million of their graduates to agro-industrial branches. They will have to grasp the baton of shock labor in the major areas of the implementation of the Food Program. "One can be confident that this section," noted Comrade L. I. Brezhnev at the plenum, "will be headed by people who know their business, who are avid about their work and who are able to work with people." To train and educate precisely such specialists is the main thing in the activity of the higher schools which are implementing the plenum decisions.

The Food Program clearly outlines the priorities for research and dictates the crucial problems in the development of the agro-industrial complex during the 1980's.

First of all, from the standpoint of the plenum's decisions it would be expedient to analyze the latest scientific achievements of scientists of the higher schools and also the subject matter of the research conducted in the VUZ's in order to reveal and submit for the most rapid utilization those results of scientific research whose implementation even today can make an essential contribution to the solution to the food problem. It is also necessary to make adjustments to those plans that have already been implemented, concentrating the attention of scientific collectives on the tasks of accelerating scientific and technical progress in the agro-industrial branches. The essence of these measures consists, of course, not in breaking down the existing special-purpose programs and coordinated plans, but in completely utilizing the existing scientific stockpile and revealing reserves for operational introduction of the results that have been obtained. For example, the programs for problems of robot technology contain a large number of universal applied tasks whose immediate implementation can produce a significant economic and social effect. This pertains even more to those areas of scientific work which directly correspond to the assignments of the Food Program. We have in mind comprehensive research in the area of soil science and agrochemistry, the development of problems of the nonchernozem zone, efficient utilization of the natural resources of Siberia and protection of the environment. In order to step up this research it is necessary to enlist scientific collectives from various VUZ's.

The important position the Food Program assigns to the development of biology as a theoretical base for agricultural science and practice makes it incumbent on us to utilize the scientific potential of the universities intensively and to strengthen their creative ties with agricultural VUZ's and scientific institutions of VASKhNIL.

The large detachment of VUZ teachers of technical sciences constitutes a significant reserve of scientific forces which can participate in solving problems of comprehensive mechanization of farming and animal husbandry and technical re-equipment of the food industry and trade. The efforts of scientists should be directed toward raising the technical-economic and operational level and improving the quality and reliability of machines and mechanisms as well as toward creating complexes and systems of them that provide for mechanization and automation of all units of the production process. Of special importance here are problems related to the development of agricultural machine building and also machine building for the food industry and trade. We will have to organize the implementation of technologically oriented special-purpose programs of research in specific directions of technical re-equipment of agriculture and branches related to it.

It is also necessary to utilize more fully the significant creative forces of VUZ's which concentrate in the area of economic sciences. The scientific collectives of 60 VUZ's have been joined together within the framework of the coordinated plan for economic research and have already accumulated a certain amount of experience in the development of problems relating to improving the economic mechanism. Based on the directives of the Food Program, this plan should also include issues related to strengthening autonomous financing in branches of the agro-industrial complex, improving the system of material incentives here, and strengthening and increasing the effectiveness of economic ties among agricultural enterprises, the processing industry, trade and public catering, and also machine building and transportation enterprises that serve them.

The central organizational problem in increasing the contribution of VUZ science to the development of the agro-industrial complex is to expand the scope and accelerate the rates of the introduction of completed projects. In order to overcome the bottlenecks that exist here it is necessary to strengthen even more energetically the ties between the higher schools and production. A special place in the scientific subject matter of VUZ's should be assigned to research that is conducted on assignments from ministries and departments. A good example of this is the participation of the scientists of 50 universities in the development of special-purpose programs for the USSR Ministry of the Fish Industry: Comprehensive research was envisioned for the ecology, physiology and parapsychology of fish and the creation of highly productive methods of raising fish and feed organisms. One would think that the higher schools themselves could also initiate extremely important research. For example, the combination of the efforts of VUZ scientists to create economic means to create economic means of reducing losses of agricultural products during storage and processing could provide a large national economic return in a short period of time.

The most effective way of influencing the scientists of the higher schools to accelerate scientific and technical progress is to train personnel who are in the vanguard of scientific thought. Therefore it is necessary to continue in the future to deepen the interconnection between training and scientific work, devoting special attention to contributing this to the research of future specialists.

The rates at which the food problem is solved are determined largely by successes in the integration of science and production. The higher schools have everything necessary to play an active role in this historic process. The main thing here is to place research work in the service of the crucial problems related to the development of the agro-industrial complex.

The decisions of the May (1982) Plenum of the CPSU Central Committee were approved enthusiastically and unanimously by our party and people. The situation of high labor and ideological-political enthusiasm that was evoked by the plenum's documents and the report at it by Comrade L. I. Brezhnev are the most reliable guarantee that the party plans will be implemented.

There is no doubt that all workers of higher and secondary specialized schools will do everything possible to successfully fulfill the tasks set for them for the development of the agro-industrial complex and will make their worthy contribution to the implementation of the USSR Food Program.

COPYRIGHT: Izdatel'stvo "Vysshaya shkola", "Vestnik vysshey shkoly", 1982

11772

CSO: 1828/20

LABOR

BACHURIN FOCUSES ON LABOR PROBLEMS

Moscow SOTSIALISTICHESKIY TRUD in Russian No 8, Aug 82 pp 3-14

[Article by A. Bachurin, deputy chairman of USSR Gosplan, doctor of economic sciences: "Labor-Saving Problems in the Economy"]

[Text] The Course Set for Intensive Development

The Soviet economy entered the eighties with a mighty production potential. Academic science and multisector applied science have been developing in the country at high rates. The level of education and qualifications of workers and engineering and technical personnel have risen. The effort to improve the economic mechanism began at the end of the seventies and is now being carried forward. But the organizational structure and methods of conducting economic activity which took shape at a time when extensive factors of economic growth had great importance and which are typified by high rates of new construction and an increase in the size of the labor force, are still being retained in management of the economy. In the seventies, for example, the annual increase in the number of workers and employees was approximately 2 million persons.

Because of the high growth rates of construction and installation work and assignment of a larger portion of equipment to new construction, the relative share of outlays for retooling and reconstruction in the pattern of capital investments has remained comparatively low. Consequently, in a number of sectors fixed productive capital has aged, and a high level of expenditures of manual labor has been retained. This has in turn brought about a drop of the growth rates of labor productivity, the gradual occurrence of a "shortage" of manpower, and a rise of personnel turnover in a number of sectors, which is having an adverse effect on qualitative performance indicators. Proceeding from the economic strategy of the CPSU, then, the 26th party congress defined new directions in development of the productive forces and adopted a course toward conversion of the entire economy in the eighties to a predominantly intensive development strategy, which guarantees attainment of the best final results at relatively smaller expenditures of labor and physical resources. In the 11th Five-Year Plan faster growth rates of the national income have been envisaged as compared to the growth of capital investments. Higher growth rates of labor productivity have been outlined in industry, capital construction and transportation as compared to those actually attained in the previous 5-year period. Standard allowances of physical inputs per unit output and work done have been reduced substantially.

Fulfillment of the USSR Food Program for the Period up to the Year 1990, approved by the May (1982) Plenum of the CPSU Central Committee, will have very great importance to the intensification of agricultural production. The decrees of the CPSU Central Committee and USSR Council of Ministers approved by the plenum envisaged a system of organizational, economic and social measures aimed at improving the living conditions of the rural population, at raising labor productivity and stabilizing the labor force on kolkhozes and sovkhozes, and at bolstering the staffing of supervisory personnel and specialists. In his address at the plenum Comrade L. I. Brezhnev emphasized: "The methods of management and planning, the incentive procedures, and the mechanism for the conduct of economic activity should create conditions for highly productive labor." The decrees adopted by the plenum of the CPSU Central Committee indeed took this statement of principle as their point of departure. Carrying them out will make it possible to substantially increase the volume of production of agricultural products on the basis of more optimum and efficient utilization of labor resources and productive capital.

In recent years quite a bit has been done toward full realization of the decree of the CPSU Central Committee and USSR Council of Ministers entitled "On Improving Planning and Strengthening the Influence of the Economic Mechanism on Increasing Production Efficiency and Work Quality." But the results for 1981 and the first half of 1982 indicate that a radical change of direction has not yet occurred toward improvement of the indicators of the efficiency and quality of work. Many ministries are not meeting targets for labor productivity, and the rates of its growth in industry as a whole have proven to be lower than those set by the 5-year plan for this period. Labor productivity in industry rose 2.7 percent last year, although the approved plan envisaged a growth of 3.6 percent. At the same time the average wage rose 2.3 percent, which is in line with the plan. Labor productivity in capital construction rose only 2.2 percent (3.5 percent in the plan), but the average wage of construction workers rose 3.3 percent instead of the 1.7 percent called for in the plan. The average wage of railroad workers also increased at a faster rate than labor productivity.

Thus the causes of the nonfulfillment of assignments for the rise of labor productivity should be sought first of all not in the lack of funds for stimulating it, but in the fact that ministries and enterprises are still not carrying out the necessary organizational and technical measures to save on labor resources. In many cases even new equipment being furnished to production is not yielding a substantial saving on expenditures of labor. Nor has the question yet been resolved of substantially tightening requirements for saving on inputs of labor in state standards.

How, for example, can one explain the fact that labor productivity in the first quarter of 1982 was lower than for the same period of 1981 at enterprises of Minnefteprom [Ministry of Petroleum Industry], Minugleprom [Ministry of Coal Industry], Minchermet [Ministry of Ferrous Metallurgy], and Minlegprom [Ministry of Light Industry]? Evidently by the fact that fulfillment of targets for labor productivity in those sectors was not put at the center of attention of production collectives. These and indeed other ministries as well are still in many cases submitting requests to USSR Gosplan for allocation of

additional workers and employees, forgetting that the growth of labor resources in RSFSR, UkSSR, BSSR, and the Baltic Republics has dropped sharply and under those conditions it is possible to fulfill planning targets only by unflinchingly achieving the growth rates of labor productivity outlined for the respective years of the 5-year plan.

Do the realistic prerequisites and opportunities exist for attainment of a more substantial saving on expenditures of labor in the coming years of the 5-year period and for overcoming the shortage of manpower in a number of sectors and regions of the country? Of course they do. The main thing here is to speed up scientific-technical progress and on that basis to raise the growth rates of labor productivity. In the 11th Five-Year Plan the process of renewal of the technology must be speeded up 1.5-fold. But in actuality the necessary rates have not yet been attained, especially in the sector for creating the progressive technology that guarantees the greatest economy on inputs of labor and physical resources. It is not only and not even so much a matter of underestimation of scientific-technical progress by many managers of enterprises or production collectives, but of serious shortcomings in the organization and management of science and technology, the substantial gap that still exists between the activity of many scientific-technical subdivisions and that of production associations and enterprises, of the separateness of plans for science and technology from production plans, including plans for series production of new technology. Wherever that gap has been closed and separateness corrected, wherever a unified scientific-production complex or well-organized production association is functioning ("Svetlana," "LOMO," "Elektrosila," etc.), the results have been forthcoming—any of the products of those enterprises are being manufactured at the level of world standards, and it is there that a sizable economy is being achieved on inputs of labor and physical resources. But the process of creating the optimal scientific-production and production associations, in which scientific-technical subdivisions would work with production subdivisions according to a single plan, is still far from completion in industry, much less other branches of material production. As has been rightly and repeatedly noted in the press, the departmental disparateness of enterprises, scientific research institutes, and mechanical engineering and process engineering subdivisions is the obstacle here.

The advantages of the social organization of labor are not being fully utilized in speeding up scientific-technical progress. Shortcomings in criteria for evaluation of performance and methods of economic stimulation are having an effect. The decree on improvement of the economic mechanism is so far being carried out inconsistently and half-heartedly both by production enterprises and also by scientific research organizations. For instance, the provisions concerning enhancement of the cost-accounting (khozraschet) accountability of scientific research collectives for the final results of activity from the standpoint of the national economy are in many respects not being realized at all. That is why additional organizational and economic measures need to be performed to speed up scientific-technical progress in the economy and to raise the growth rates of labor productivity on that basis.

The retooling of existing enterprises, combined with simultaneous expansion of efforts to mechanize the principal production sections and auxiliary sections in machinebuilding, ferrous metallurgy, light industry, the food industry and other sectors has a large role to play in improving the use of labor resources and in eliminating the "shortage" of manpower. Reality is dictating the need not only to fulfill, but even to substantially overfulfill the assignments of the 5-year period for the retooling and reconstruction of production. To that end, in our opinion, beginning with the plan for 1983 we need to revise the list of new construction projects, to carry commencement of construction of certain projects over to the subsequent years of the 11th Five-Year Plan or even to the 12th; to increase in the product mix of machinebuilding the relative share of equipment and mechanization devices necessary to retool existing enterprises; to redistribute a portion of equipment that exists in the sectors of the economy in order to increase output at enterprises or in their branches which have labor resources available.

Reducing the use of manual labor is an extremely important potential for raising labor productivity and improving the utilization of labor resources. In this respect, as is well known, we lag far behind a number of states which are advanced from the economic standpoint.

In accordance with the assignments for the 11th Five-Year Plan, many ministries and union republics have paid closer attention to the problem of reducing the use of manual labor and have begun to draft sectoral and regional programs to solve it. Specific measures in this area have also been outlined and will be carried out within the framework of the nationwide program drawn up in accordance with the decree of the party and government to improve the economic mechanism. Drafting this program at various levels of administration is aimed at reducing the number and proportion of workers employed at manual operations without machines and mechanical devices and also those in jobs where there is a high share of manual labor in attending machines and machinery. Provision has been made for more intensive development of mechanization and automation of production processes, for introduction of progressive technology and progressive methods of the organization of work and of production. This program will in the very near future become an important component of the plans of ministries, union republics, associations and enterprises. It is based on a number of scientific-technical programs, specifically those for development of mechanization and automation of materials handling, loading and unloading and warehouse operations in industry, agriculture and other sectors (approved in August 1980); on the drafting of a system of normative materials for comprehensive organization of the work of workers (December 1980); on the creation and application of progressive technological processes in warehouse operations in industry and other sectors of the economy (June 1981); and on development and introduction of a system of containerized and palletized freight shipments (December 1981).

A special role is being given to increasing the production of materials-handling machines and equipment. In 1980 the volume of their output reached 2.9 billion rubles and increased 1.4-fold over the 5-year period. This made it possible to raise the level of mechanization of materials-handling operations from 70 percent in 1975 to 78 percent in 1980 and to achieve a labor saving of

about 60,000 workers employed at manual labor. In the program for development of mechanization and automation of materials handling, loading and unloading and warehouse operations outlined for the 1981-1985 period, provision has been made for increasing by 33 percent the production of equipment for these purposes, including a 36.8-percent increase in the production of lift trucks, and a more than twofold increase of the total load capacity. The production of containers will increase 1.5-fold.

Performance of these measures to reduce the use of manual labor, of course, still does not solve the multifaceted and complicated problem of speeding up the growth rates of labor productivity, since it includes a broad range of scientific-technical, organizational and economic aspects. Successful performance of this task in these next few years will depend not only on speeding up scientific-technical progress, but also on improving the organization of work and management and on improving the training of worker personnel and engineering and technical personnel. The rise in the productivity of live labor, and of aggregate social labor even more, depends on many other factors as well and reflects as at a focus the rise in the efficiency of social production as a whole. For instance, to speed up the rise of labor productivity it is very important to develop machinebuilding at faster rates, to adhere to progressive intersector and interregional proportions, and to correctly distribute labor between the production and nonproduction spheres.

During the 11th Five-Year Plan provision has been made to reduce the number of workers in project planning and scientific organizations and in the sectors of culture and to slow down the growth of the number of workers in the trade sector. The organizational structure of management is being improved, and on that basis the administrative and managerial apparatus is being reduced, which will make it possible to correct the ratio between the production and nonproduction spheres in terms of the number of employees, which recently has experienced unjustified changes.

It is self-evident that there will be a continued growth of the labor force in public education, health care, children's preschool institutions and consumer services, since this growth is organically related to the growth of physical production and results from the needs of social development. However, as an analysis has shown, an unjustified growth of employment in a number of sectors of the nonproduction sphere, especially in management, was not brought about by the needs of social production. Moreover, the excessive growth of organizations of all kinds and the complexity of the multilevel structure of management bodies have brought about an unjustified growth of the administrative apparatus and have created quite a few difficulties in organizing the economic activity of enterprises. That is why the issue of improving the proportions in the training of specialists and the issue of a certain redistribution of labor resources among the sectors and spheres of activity have been put on the agenda.

The Most Important Direction of Technical Progress and the Rise of Labor Productivity

Speeding up the growth rates of labor productivity is under present conditions a decisive factor in balanced and optimum utilization of labor resources. The need for higher growth rates of labor productivity than those that occurred in recent years is dictated above all by the course of the party set toward greater intensification of production and toward raising production efficiency. The rise of production efficiency is characterized in its most general form by the rise of the productivity of social labor. Only on that basis is it possible to augment more rapidly the country's national income, which characterizes the end result of social production.

The growth rates of the national income now depend entirely on raising the productivity of social labor. It is thanks to this that our socialist society can continuously develop the productive forces and raise the level of personal and social consumption. This circumstance needs to be especially emphasized, since in the press the problem of speeding up the growth rates of labor productivity in the eighties is often associated primarily with the deterioration of the demographic situation, forgetting Lenin's proposition that if socialism does not achieve a higher level of labor productivity, it cannot be victorious in the economic competition with capitalism.

Along with speeding up scientific-technical progress, in achieving higher growth rates of labor productivity it is important to substantially intensify the effect which all links of the economic mechanism have on efficient utilization of labor resources. Its close relationship and interdependence with improvement of the economic mechanism should be taken into account in this connection. The practical experience of the USSR is persuasive that an appreciable acceleration of scientific-technical progress cannot be achieved without the proper reorganization of planning, the organizational structure of management, financing, remuneration and pricing.

The decree of the CPSU Central Committee and USSR Council of Ministers on improvement of the economic mechanism envisaged a number of measures aimed at expanding the output of highly efficient new technology: conducting evaluations of the technical level of machines and equipment, introduction of extra-departmental expert evaluation and state tests of the most important new products, revision of outdated standards, improvement of indicators assigned in the 5-year plan for introduction of new technology and progressive know-how. A large role in this connection is being given to the 170 intersector and sectorwide scientific-technical programs. Yet in spite of all that no substantial acceleration of the development and application of highly efficient new models of machines and equipment by sectoral institutes and production and scientific-production associations is occurring as yet. Often a product whose use does not yield an appreciable saving of live and embodied labor is manufactured in the name of new technology. Outlays for new technology are in many cases increasing more rapidly than the rate of improvement of its performance. Evidently the present economic mechanism for stimulation of the production of highly efficient technology is not in a number of cases creating authentic advantages for those producing it. Even when the premium is applied

to the wholesale price, it does not fully compensate for a number of losses that occur, given the present indicators used for evaluating the results of enterprise performance. The following would seem to be necessary in order to speed up scientific-technical progress: first, to accomplish a further improvement of the planning of science and technology, to strengthen in plans the orientation of scientific-technical and production subdivisions toward improvement of the final results for the national economy; second, to pay more attention to the overall impact of all the economic instruments and incentives on speeding up development and, most important, on application of new technology to production; third, to improve the organizational structure of management.

In the field of planning the most important issues now being discussed are a further enhancement of the role of the program method of planning development and application of new technology. Every program has to project the ultimate goals, the technical-and-economic result, the periods of time and stages for performance of operations beginning with scientific research and ending with organizing industrial production of the new product and application of the progressive technology, and also assignment for revision of standards, quotas and standard rates which guarantee a rise of labor productivity, conservation of physical resources and higher quality.

Problems related to strengthening the role of economic levers and incentives and cost-accounting methods of management in speeding up technical progress have been put on the agenda. It is well known that the present economic mechanism is still not altogether solving these problems. Enterprises producing new technology are not always fully compensated for their higher costs, especially in the first year of operation. That is why there is a need for still further enhancement of the role of wholesale prices and the cost-accounting fund for financing outlays for development and application of new technology so that favorable conditions and advantages can in fact be created for those enterprises which are expanding the output of efficient new products. We are referring here both to increasing the effectiveness of financial incentives and also to strengthening penalties for those manufacturing outdated products.

Another major task is to put order in the network of scientific institutions in the sectors of the economy and to complete the creation of scientific-production or production-technical complexes on the basis of a closer unification of sectorwide scientific-research institutes and mechanical and process engineering organizations with enterprises. This will make it possible to orient their joint activity toward improvement of the final results.

In many cases the effort to create such complexes or associations has not yet been brought to its conclusion. The measures outlined by the decree on improvement of the economic mechanism concerning this matter have still not been carried out by many ministries. The creation of scientific-production associations which are optimal in their organizational structure and the functions they perform has not been completed. Some of them have been set up only in a formal sense.

A number of problems related to improved planning, financing and economic incentives of existing enterprises also have to be solved to speed up the work to reequip them. Until recently, for example, a clear method and appropriate standards were lacking in the planning of these efforts, including proper procedure for the drafting and approval of project plans and estimates and for furnishing material and technical resources. The planning of limits on capital investments for reconstruction and retooling was introduced in 1981. But ministries are not uncommonly carrying on new construction on a large scale under the guise of reconstruction. In view of the fact that in coming years retooling will have particular importance in speeding up the growth rates of labor productivity and in improving product quality, there is every reason to single out outlays for these purposes in the plan. Not only should every kind of support be given to the initiative of production associations (enterprises), but their rights should also be broadened in planning these operations and in financing them from the resources of the production development fund and bank credit.

In future we cannot reconcile ourselves to a situation in which many ministries are committing breaches of the decree on improvement of the economic mechanism with respect to utilization of the production development fund, which has been turned into a source for financing centrally approved capital investments. Though setting forth outlays for retooling in plans does to some extent make planning more complicated, under present conditions it is economically advisable. It is also necessary for construction ministries to pay far more attention to reconstruction and retooling of enterprises. In order to enhance their motivation to do this in January 1980 USSR Gosstroy set forth sectorwide coefficients for adjusting estimated prices and standard allowances for overhead. Yet these measures are evidently still inadequate, and construction and installation organizations are avoiding projects of this kind. Circumstances like these and also the fact that project planning and surveying work are not planned separately for retooling projects, are erecting quite a few obstacles. They all have to be eliminated in the very near future and retooling projects expanded by the direct labor method, as is being done successfully by many progressive associations and enterprises.

Strengthening Planning Principles in Redistribution of Labor Resources

Improved planning of labor productivity and the number of workers and employees has considerable importance to optimum utilization of labor resources. New problems are arising in the context of the economy's transition to intensive development. For instance, the planned and organized redistribution of labor resources among the country's enterprises, sectors and regions is becoming urgent. As scientific-technical progress speeds up, higher requirements are being set for the quality of training of workers and specialists, and social factors are becoming more important in the stabilization and optimum use of labor resources. Higher requirements are being imposed on methods of planning those resources, and the role of multiannual and above all 5-year plans in guaranteeing efficient utilization of labor resources is being strengthened. New labor indicators which contribute to optimum distribution of manpower among sectors and regions of the country and to the rise of labor productivity are being introduced. These are the limits on the number of workers and

employees, assignments for reduction of the use of manual labor, and the standard wage per ruble of output.

Use of the normative net output indicator (NChP) in the manufacturing branches of industry has great importance to improving the planning of labor productivity. It expresses in money terms the new labor expended in production of the product and promotes more correct reflection in plans and reports the labor efforts of every enterprise, its actual contribution to the country's economy. The NChP indicator is based on the normative approach to expenditures of labor and presupposes in turn improvement of standard amounts of labor. Normative net output, which is set at the average level of the sector, reflects more precisely than other indicators the dynamic pattern of labor productivity. It is not influenced by the differing rates of profitability of products and differing materials intensiveness, and it makes it possible to safeguard in plans and the economic system the optimum relationship between the rise of labor productivity and the average worker wage. The standard wage per ruble of net (normative) output is better grounded and more objective than standards per ruble of commodity or gross output, especially in materials-intensive branches. Normative net output and the standard wage are as a practical matter devolved to work teams, which is important in developing intraplant cost accounting and in stimulating labor saving in them.

The importance of balances of labor resources for union republics, oblasts and large cities has increased greatly in the planning of labor. In and of themselves they, of course, do not automatically guarantee labor savings. But in the process of drafting them and carrying them out planning agencies and labor agencies outline and carry out specific measures aimed at training personnel in good time with the necessary skills and organized redistribution of labor resources among the country's sectors and regions. Compiling multiannual balances of labor resources is an important instrument for optimum location of the productive resources and is having a constructive impact and planned change of the production structure so as to take into account savings on expenditures of labor. Without them it is not possible to solve the problems arising in connection with the increasing complexity of regional problems of utilization of labor resources. One of them is replenishing and stabilizing labor resources in the regions of Siberia and the Far East. In the years of the 10th Five-Year Plan, as is well known, success was not achieved in solving this problem. Reality has shown that an interrelated set of economic and social measures is required for this purpose. Yet the task has been reduced mainly only to raising wages—to introducing coefficients and supplements for length of service in remote regions and regions undergoing initial development. Not enough attention is being paid to measures to improve housing conditions and cultural and consumer services, nor to increasing the production and sale of foodstuffs and industrially produced goods.

In the report address of the CPSU Central Committee to the 26th party congress Comrade L. I. Brezhnev said: "Some people assume it is enough to increase wage premiums in Siberia, the Far East and the northern regions and people will stop leaving there. The premiums are, of course, necessary. But this alone does not solve the problem. A man leaves Siberia, say, usually not because the climate does not suit him or his wages are low, but because it is more

difficult to obtain housing there, to place his child in a nursery school, and there are few culture centers. That is why we are planning in this 5-year period to introduce still higher rates of construction of housing and the entire social and cultural service complex in those regions and to improve the supply of volume-demand goods to the public." The plan for the 11th 5-year period has called for predominant growth of the volume of resources to be committed to housing construction and to the opening of new children's preschool institutions, schools, hospitals and other social and consumer service facilities in that region. In 1985 the total volume of resources to be committed to those purposes will be 1.4-fold greater than in 1982. Whereas in the current 5-year period activation of housing in the European part of RSFSR financed with state capital investments is intended on a somewhat smaller scale than in the 10th, it will be 115 percent in the regions of Siberia and the Far East. The opening of hospitals will rise to 120.6 percent and the opening of children's preschool institutions up to 106.3 percent. There will be an appreciable increase in the average supply of housing to the urban population, especially in the West Siberian economic region. The population of Siberia and the Far East will in 1985 have a higher number of hospital beds and also general public schools relative to population than for RSFSR as a whole. More local young people will be trained as skilled workers and specialists. The USSR Ministry of Trade and Tsentosoyuz have been set the task of improving the trade in foodstuffs and industrially manufactured goods there.

Party and Soviet organs of the krais and oblasts of Siberia and the Far East are doing quite a bit to increase production of goods from local resources and with local capabilities. The decisions of the May (1982) Plenum of the CPSU Central Committee are creating opportunities favorable to this. At the same time other regions of RSFSR and also union republics must also pay constant concern to increasing deliveries there of consumer goods, including fruit, early vegetables, etc., bearing in mind that the workers of Siberia and the Far East are making the principal contribution to development of the fuel and energy complex, which is meeting the needs of the entire country. The Baykal-Amur Main Rail Line being built is truly the child of the united family of nationalities of the USSR. The 26th CPSU Congress called upon the union republics to increase their contribution to development of the productive forces of Siberia and the Far East. The labor resources of that region will be further replenished from their population, and that requires a great amount of organizational work to send a portion of manpower to those regions from republics with adequate labor resources on the basis of organized recruitment or interrepublic redistribution. Another reason for this measure is that the situation with labor resources has undergone substantial change in RSFSR. For instance, reserves of manpower are practically exhausted in the Nonchernozem Zone of RSFSR. More than that, a number of oblasts in that zone are themselves in need of trained workers and specialists. Even in the Chernozem Zone the situation with labor resources has deteriorated.

At the same time a sizable growth of the able-bodied population is anticipated in the future in the republics of Central Asia, Azerbaijan SSR and the southern portion of Kazakhstan. Uzbek SSR, for example, has tremendous tracts of undeveloped fertile land, and a large variety of minerals whose working could be considerably increased in coming years. Very favorable prospects have also

taken shape in it for development of light industry and the food industry. The Uzbek CP Central Committee and UzSSR Council of Ministers have adopted the correct course of building small enterprises or branches of enterprises in light industry and other branches of industry. In that republic they have learned to build rather rapidly and to achieve high indicators in the utilization of equipment. By the outset of 1982 290 branches of enterprises had been built and put into operation, and by the end of the 5-year period they will number more than 700, which will make it possible to produce another 1.7 billion rubles of output and to employ about 140,000 workers and employees. As a rule the branches can operate on two shifts or more because they are located near rural or small urban settlements which have a reserve of labor resources.

The new branches not uncommonly are experiencing a need for equipment, and at the same time there are surpluses of equipment at other enterprises. The reason for this is slowness in handling these matters on the part of union and union-republic ministries, in particular the USSR Ministry of Light Industry, which has not shown the requisite responsiveness and has not fully taken into account the fact that equipment being replaced at parent enterprises can be used in the branches.

A different approach needs to be taken to the construction of new vocational and technical schools. They need to be concentrated in regions with a high population growth, where there are young people, where new enterprises or branches can and should be created, where new land is being developed. Whereas for the country as a whole enrollment of young people in training centers of the system of USSR State Committee for Vocational and Technical Education is to increase 7 percent during the years of the current 5-year period, it will increase 32 percent in UzSSR, 29 percent in TaSSR and 47 percent in TuSSR. Yet the requests of the republics of Central Asia and Azerbaijan SSR are still not being satisfied. Construction ministries are building vocational and technical schools there with extreme slowness, though by the nature of things they are priority projects.

In spite of the very great opportunities for increasing the number of persons employed within the republics of Central Asia, Azerbaijan SSR and the south of Kazakhstan, a portion of the able-bodied population, especially young people, can best be used, as experience is demonstrating, in other regions where without their help it is difficult to solve the problem of the further development of the productive forces. For example, many workers and specialists from UzSSR are working successfully to build the projects of the BAM [Baykal-Amur Main Rail Line] and also in a number of oblasts of the Nonchernozem Zone of RSFSR. The workers of Azerbaijan are making a large contribution to increasing the production of petroleum in Siberia and other regions of the country.

Improving the Organization of Work and Management

Improving the organization of work and management, extensive introduction of NOT [scientific management], plays a large role in achieving optimum utilization of labor resources. Measures related to NOT are being envisaged in 5-year and annual plans. But NOT's potential for raising labor productivity is not being fully utilized. Meanwhile, even assuming extensive application of new

technology to production, a substantial rise of labor productivity cannot be assumed if methods of scientific organization of work are introduced without vigor. Enterprises where measures to improve the organization of work are not being carried out adequately and where production plans are not being fulfilled have come to be referred to as stragglers or poor achievers. There are still many of them in agriculture, in construction and in a number of branches of industry. As is evident, in the work of sectoral ministries and regional administrative agencies the problems of improving the organization of work and management, including the development and introduction of NOT, are not given the space they deserve. At the same time one can give examples of the sizable growth of labor productivity that has been achieved by improving organization and management (with the same capital investments). For example, in Georgian SSR the volume of agricultural output is increasing appreciably as a result of improved organization and management of the republic's agricultural production. Attention should be paid to the experience of Leningrad, Murmansk and other progressive construction organizations using progressive methods of organization and management. But we should also take into account the reverse effect--work collectives which are well organized and managed impose higher requirements as to new technology and its improved use.

At this point we will discuss the problem of introducing the running of more than one machine and the combination of occupations. At the beginning of 1981 20.8 percent of the workers in the 11 machinebuilding ministries were running more than 1 machine or unit, and at the end of the 11th Five-Year Plan the NOT plan calls for their number to rise to 26.3 percent. But in Minkhimash [Ministry of Chemical and Petroleum Machinebuilding] their proportion was only 9.2 percent, in Minstroydormash [Ministry of Construction, Road, and Municipal Machinebuilding] it was 12 percent, and in Minlegpishchemash [Ministry of Machinebuilding for Light and Food Industry and Household Appliances] it was 12.6 percent. The largest potential for workers to run more than one machine is in the branches of large-scale production where extensive use is made of automatic equipment; for example, in the motor vehicle industry the relative share of workers running more than one machine has risen to more than 30 percent, and all the conditions exist for its further rise. Improvement of the qualitative characteristics of the equipment produced and of cutting tools has paramount importance to expanding the running of more than one machine tool. At the same time improved organization of work and introduction of NOT are having a considerable impact.

The practice of combining worker occupations is also becoming widespread in industry, capital construction, agriculture and transportation. Yet this process is still going slowly because of shortcomings in the organization of production, the organization of work, and the organization of management. In machinebuilding, for example, the number of workers combining operations is only 7 percent, and by the end of the 5-year period it will rise only to 10 percent. In accordance with the decree of the USSR Council of Ministers dated 4 December 1981 and entitled "On the Procedure and Conditions of Combining Occupations (Jobs)" opportunities have been considerably expanded for engineering and technical personnel, other specialists, employees and junior service personnel to combine occupations. Enterprise directors have the right, with consent of trade union committees, to permit these workers to combine occupations

or jobs at one and the same enterprise or in an organization when this is economically feasible and does not detract from the quality of the product or work performed. The provision of the decree and improvement of the economic mechanism which speaks about application of one of the progressive methods of organization of work and work incentives (the Shchekino experiment) is thereby undergoing further concretization and development.

Improving the setting of work quotas is one of the conditions for organization of work on a scientific basis. Unless progressive quotas are introduced, high growth rates of labor productivity cannot be counted on.

As is well known, there are financial incentives for work done according to technically sound quotas. But still the share of piece-rate workers working according to quotas with 20-percent higher unit prices has not only not increased in the machinebuilding industries during 1981, but even dropped to 32.9 percent from the 1979 level of 35.4 percent.

A sizable potential for saving on labor resources can be activated by improving the setting of work quotas for time-rate workers, especially auxiliary workers. In 1981 only 0.3 percent of the time-rate workers were made available for other tasks as a result of revision of quotas in the industrial sector. In a number of ministries quotas have not been envisaged for these workers for several years now, and this is having an adverse effect on the growth rates of labor productivity.

The facts given indicate that improved setting of work quotas represents a major potential for saving on work time in industry and capital construction. In our view the experience of the GDR deserves attention in solving this problem and should be studied in detail.

Introduction of work-team forms of organization and work incentives is playing a large role in labor saving and in raising labor productivity. It is especially important to make a broader transition in the current 5-year period, as envisaged by the decree on improvement of the economic mechanism, to the organization of mixed work teams operating under a single job order. Many such teams which have been set up, say, in construction are raising labor productivity by 30-35 percent. At enterprises of Chelyabinsk work teams have performed well operating under a single job order and paid for the final results of work. There are now more than 6,000 such teams there, and in construction the method of the work-team contract is used in performing more than 45 percent of construction and installation work. As a rule all the workers in the work team fulfill output quotas and substantially reduce work time losses. In 1981 introduction of the work-team form of organization of work made more than 300 persons available for work in other sections.

Many work teams operating at construction sites and industrial enterprises of Moscow, Leningrad, Sverdlovsk, Kaluga, Krasnoyarsk and other cities are achieving high results. The thing now is to solve in a comprehensive way all the problems involved in development of this progressive form of the organization of work and work incentives. There is a need to improve planning, to eliminate bottlenecks and disproportions at enterprises, and to improve the organization

of production and management and material and technical supply. Much also depends on work-team leaders, on the training they are given in the management of production. In short, the point is the combined improvement of the organization of work and the organization of management.

The experience of enterprises in Dnepropetrovsk Oblast eloquently indicates the need for the systems approach to the problems of the organization of work and the management of production. They are successfully introducing a comprehensive system for increasing production efficiency and the quality of performance (KS PEP i KR). The growth rates of labor productivity at those enterprises are on the average 1.5-fold higher, and work time losses considerably lower, than at those which are still operating in the old way.

An important element of the system is the creation of mixed work teams and mixed work teams which work from start to finish, remuneration being made for the end result, the work team has its own working papers, and contracts are concluded between work teams. Creative cooperation of engineering and technical personnel with workers and cost-accounting relations among shops, sections and work teams are developing. All of this is creating a favorable psychological climate in work collectives and the conditions and prerequisites for every worker and the collective as a whole to display creative potential. As a result labor productivity and the quality of work are rising, and work time losses and personnel turnover are dropping sharply.

Trained people have always been and always will be the most valuable capital of socialist society. The task now is to use that capital more astutely and efficiently, to guarantee a higher return from it in all sectors of the national economy, and to speed up the growth rates of labor productivity.

COPYRIGHT: Izdatel'stvo "Transport", "Sotsialisticheskiy trud", 1982

7045

CS0: 1828/7

LABOR

IMPACT OF TECHNOLOGY ON LABOR WEIGHED

Moscow VESTNIK MOSKOVSKOGO UNIVERSITETA--EKONOMIKA in Russian No 4, Jul-Aug 82
(manuscript received 21 May 81) pp 46-54

[Article by Ye. A. Soboleva: "Technology's Impact on the Richness of Work"]

[Text] The supreme goal of social production under socialism is the fullest satisfaction of the material and nonmaterial needs of the workers. In the report address of the CPSU Central Committee to the 26th congress Comrade L. I. Brezhnev, general secretary of the CPSU Central Committee, said: "The point of departure of the party and political approach to the economy has been and is now the unvarying programmatic requirement--everything in the name of man, everything for the benefit of man."¹

Comprehensive harmonious development of the personality takes place not only through satisfaction of material and nonmaterial needs, but to a greater degree in the process of labor. Along with the economic results of the work process, the party and government pay considerable attention to the social aspects of its development. It was emphasized at the 26th CPSU Congress: "Soviet society is a society of people who work. The party and state have made and are making many efforts to make man's work not only more productive, but also rich, interesting and creative. Elimination of unskilled manual labor and heavy physical labor is called upon to play a most important role here. At present we still have millions of people doing such work. This is not only an economic problem, but also a serious social problem. Solving it would signify removal of substantial obstacles on the way toward transforming labor into every man's primary need in life."² For technical and economic reasons technology and the organization of work do not always guarantee correspondence of a job's content to the level of education and social needs of the workers. The adverse consequences of this phenomenon may be difficulties in building a staff of skilled workers; turnover of personnel; a drop in product quality, labor productivity, etc. Work that is poor in content is one of the essential obstacles to social development of the personality. Everything we have enumerated above imposes high requirements on the internal structure of the work process.

The main tendency in development of the content of workers' work is increasing complexity. And the workers in turn, especially young workers, who have a high level of education, are advancing high requirements as to the content of

their work. We should note that these requirements do not come down merely to reduction of heavy physical labor. Such factors as the diversity of the work process, the worker's independence, his responsibility, the opportunity for creativity and improvement of professional skills are taking on ever greater importance for present-day workers. The elements listed above, we will provisionally refer to them as "creative," are present in differing degrees in any specific type of work and are embraced by the category "content of work." "The content of work is the most mobile category characterizing work. This is largely because of the great number of elements, characteristics, criteria and factors embraced by this category."³

As a general characteristic of the inherently technical aspect of work, the content defines the work process in terms of a set of work functions, without distinguishing within it the creative elements enumerated above. The extent of their presence in work figures essentially as a description of the contents of work and determines its richness, which, as a description of the contents of work, is influenced by the same factors as the contents: the level of development of means of production, production technology and the organization of production. The characteristics of the work functions of the workers serve as the internal elements of the richness of work, just as for the content, and the breadth of their range determines the richness of the work. The range of the work function is determined by the complexity of its constituent operations, by the number of elements in the operation, by the diversity and level of physical loads on the human organism, by the relative share of the functions of exploration and calculation, and it depends on the objective conditions of production.

Characteristics and Indicators of the Richness of Work. In our view the level of complexity, the diversity of the process, and the worker's independence can be taken as characteristics of the richness of work. Expression of these characteristics in quantitative estimates has great practical importance, since it makes it possible to propose an indicator of the richness of work.

Performance of the work process presupposes that the worker has a certain amount of occupational knowledge, work habits, and the necessary level of general education. When the work is more complicated, the job rating is higher, and the worker must meet higher qualifying conditions. Taking into account the correlation between the job rating and the complexity of the work, the latter can in our opinion be evaluated from the job rating expressed in wage rate categories. The diversity of work--the second characteristic of the richness of work--is determined by the level of division of labor into operations, by the work functions, by the particular set of production operations, by the sequence and repetitiveness of their performance, and by the relevant work procedures and methods. Quantitative determination of this characteristic presents a certain difficulty. We should note the practical importance of this determination as the basis for evaluating the level of the richness of work. Taking into account the mutual dependency between the diversity of the work process and its monotonousness, estimation of the monotonousness of work should in our view be proposed as an indirect evaluation of the diversity of work.

At the present time there are several classifications of the criteria of the monotonousness of work distinguished by indicators.⁴ The most complete one has been devised by V. G. Aseyev and includes not only indicators of duration and repetitiveness, as in the other classifications, for example, that of the Scientific Research Labor Institute, but also the number of elements in the operation. Thus on the basis of a classification of the criteria of the monotony of work with respect to the indicator of repetitiveness and duration of procedures and actions of the same kind, and also the number of elements in the work cycle (Table 1) the level of monotony of work is evaluated, and an average estimate is assigned as to its diversity.

Table 1. Criteria for Evaluating the Level of Monotony of Work*

Characteristic of Operations	Level of Monotony			
	I	II	III	IV
Repetitiveness (per hour)	180	181-300	301-600	Above 600
Duration (in seconds)	100	100- 41	40- 21	20-2
Number of elements	10	10- 7	6- 4	3-2

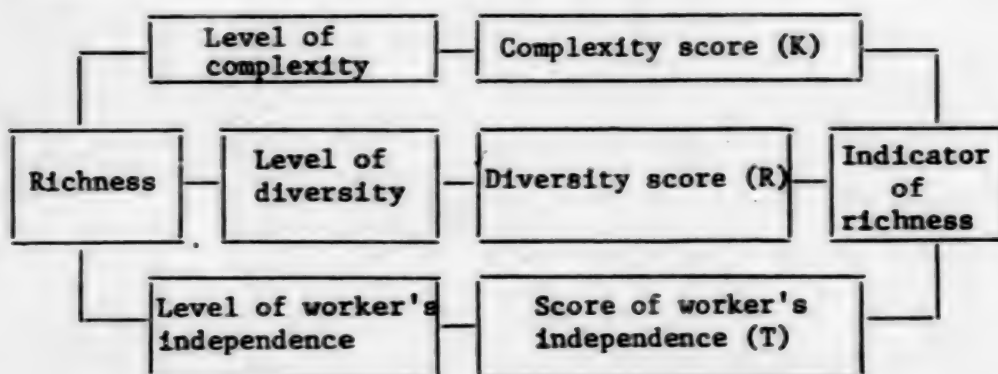
* V. G. Aseyev, "Preodoleniye monotonnosti truda v promyshlennosti" [Overcoming the Monotony of Work in Industry], p 66.

We should note that not altogether identical terms are being compared—the diversity and monotony of work. The character of their manifestation and consequences are dependent upon the organizational and technical conditions of production, and that is why there is a certain difficulty in comparing monotony and diversity of work, for example, in manual and low-skill jobs and in the context of automated production. It must be taken into account that at present there are no methods for evaluating the level of the diversity of work, and the method of computing it offered by the author is a first attempt. In spite of the shortcomings we have noted in quantitative expression of the diversity of work by comparing it to the monotony of work, it does not seem to the author possible to evaluate the level of diversity of work in any other way for the purpose of determining the level of the richness of work.

The worker's independence is a complicated term covering his production relations, his real opportunities to select and vary the parameters of the technological process, his opportunity to realize his abilities.⁵ The level of a worker's independence can be evaluated in a given case on the basis of a point system that envisages several levels—from 1, indicating the lack of any deviation from the work process, to n, which expresses almost complete absence of an established program.⁶ In determining the characteristics of the richness of work, we discover its indicators (Table 2).

There is a considerable difficulty in determining the quantitative estimates of the parameters of the richness of work and comparing them to one another in order to characterize its level. We propose that they be evaluated and compared on a point system. When each parameter of the richness of work given in Table 2 is estimated in points, we determine its quantitative characteristics.

Table 2. Characteristics and Indicators of the Richness of Work



The following formula is proposed for determining the level of the richness of work (in points):

$$S = (K + R + T)/3,$$

in which S--richness; K--complexity; R--diversity; T--worker's independence.

Table 3. Point Scores of the Parameters of the Richness of Work

Richness of Parameter	Score (in points)				
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Complexity (skill ratings of jobs)	1	2	3-4	5	6
Diversity (level of monotony, Table 1)	4	3	2	1	--
Worker's independence (expert evaluations*)	No departure from prescribed work process	Moderate departures possible	Substantial departures possible	Relatively unprogrammed work	Complete absence of an assigned program

* "Rabochiy klass v usloviyakh nauchno-tekhnicheskoy revolyutsii" [The Working Class Under the Conditions of the Scientific-Technical Revolution], p 91.

Thus in calculating the level of the richness of work with this formula work that is less rich is given a score of 1 point, and richer work is given a score of 5 points.

Interrelationship of Economic and Social Results. We should note that in the present stage of development of the productive forces improvement of economic indicators depends to an ever greater degree on solving social problems in production. As the production relations of a socialist economy develop, higher requirements are imposed not only on the economic level, but also on

the social level of efficiency of new technologies and equipment. But these objective requirements are not always fully taken into account and satisfied.

For example, the method now in effect for evaluating the efficiency of new technology does not provide for an evaluation of its social efficiency, but it is oriented only toward discovery of the economic efficiency,⁷ though it does contain instructions to the effect that measures that guarantee a rise in the technical-and-economic indicators or solve social problems do come under new technology.

Recently economists have been paying more attention to the problem of the socioeconomic efficiency of new technology.⁸ The draft of the Method of Determining the Socioeconomic Efficiency of New Technology, drafted by the Economics Institute of the USSR Academy of Sciences,⁹ in which it is proposed that the social results be stated in concrete terms, has been taken up in a session of the Scientific Council of the USSR Academy of Sciences for Economic Problems of Scientific-Technical Progress. It is typical of discussion of the draft that there is a new direction in development of the methodological evaluation of the efficiency of new technology--the socioeconomic consequences are being taken into account.¹⁰

An evaluation of technology that envisages not only technical-and-economic indicators, but also the social consequences of introducing technology, which depend to a large degree on the richness of work, would in our view have great importance in this connection. That is why it is advisable to study every version of a technology from the standpoint of the social consequences and their impact on economic indicators.

Any production system constitutes a synthesis of three interrelated and interdependent subsystems--the technical (technological process, means of labor, subject of labor), the organizational (the organization of production) and the social (collective of producers). Every design or project is characterized by social indicators, specifically such indicators as the skill rating of jobs, independence, worker responsibility, the diversity of work, etc. The efficiency with which any technical and organizational system functions is determined in large part by the level of correspondence of their characteristics. In designing new technological processes, then, correct distribution of functions between man and the machine, the internal content of the work process, has great importance from the standpoint of increasing the richness of work.

An analysis of manpower can in our view precede the process of creating new equipment and projecting the internal structure of the work process. Information on who will attend the equipment has great importance: a man or a woman, their age, their educational and skill levels. It is well known that the order of factors determining a favorable perception of work differs for men and women. This results from their psychophysical peculiarities (Table 4). An analysis of personal needs, abilities and the cultural level of workers makes it possible to determine the level of work motivation. In the Soviet economics literature it has been noted that not all workers aspire to richer work, greater promise, more responsibility, and interaction with one another in the work process.¹¹ Some people are satisfied with work that is not rich in

content (workers of the older age groups with a low level of education and skills).

When a technological system is being designed, the designers lack information on the qualitative composition of the work force of client plants, which is why the technology is designed as a rule without taking into account the skill and educational level of the workers of the client plants. But the skill and educational level of the available manpower is one of the indirect factors involved in the choice of manufacturing equipment by client plants. For instance, if the workers have a high level of requirements as to the level of richness of work, then the plant will try to acquire automatic equipment on which functions of low content are reduced to a minimum, regardless of the high cost. Otherwise the adverse social consequences, personnel turnover, for example, will detract from the system's efficiency. In the case of manpower with low skills, it is more advantageous for the plant to acquire cheaper and less productive semiautomatic equipment, whose operation requires a low or moderate level of skill.

Along with guaranteeing high technical and economic results, the main requirement on technology is in our view creation of an organization of work that presupposes a high level of the richness of work.

Table 4. Evaluation of the Possibilities of Different Characteristics of Work by Men and Women (in points)*

<u>Characteristic</u>	<u>Men</u>	<u>Women</u>
Interesting work	1	2
Direct contact with others	2	1
Satisfaction with the methods of administrative management	2	4
Pay satisfaction	4	5
Relations with management	5	2

* R. Johnston, "Pay and Job Satisfaction," INTERNATIONAL LABOR REVIEW, No 5, 1975, p 444.

Taking Into Account the Richness of Work in the Design Stage. Creating conditions for taking into account the richness of work in designing new equipment and technology has great practical importance. At the present time the abundant arsenal of technical resources makes it possible to guarantee achievement of an optimum organizational structure.

The design of new technology and equipment passes through several stages: the application for equipment, the technical assignment, the technical proposal, and the sketches, engineering designs and working plans. The request is the initial document. It is made out by the client so as to take into account the specific nature of the product to be developed and the specific conditions under which the implements of labor would be operated. It does not state specifically the social criteria that lie outside the framework of normative materials concerning scientific management,¹² which specifically applies to the level of the richness of work. On the basis of that request the technical

assignment is drawn up; it specifies the work to be done by the equipment and formulates general requirements as to implements of labor and the conditions of their operation. The technical proposal is a crucial stage in design. The designers submit for discussion their version of the technological process of manufacturing the product, determine the accuracy of machining, inspection methods and other fundamentally important technical questions. Once again the richness is not taken into account in this stage of designing implements of labor.

Selection of any technological variant depends on economic and social criteria. The economic criteria are the specific rate of consumption of raw materials and intermediate products and energy per unit output, the quantity and quality of the finished product, the level of labor productivity, the production cost, the product's prime cost, and so on; the social criteria are the indicators of the difficulty of the work, including the working conditions, hazards and strenuousness, and so on, as defined by state labor standards. Practically no consideration is given to the richness of the work of workers in the stage of designing technology.

The main reason for this situation is that insufficient attention is paid to the richness of workers' work in intersector and sectorwide NOT [scientific management] requirements. Although the intersector requirements do note that "in the shaping of occupations it is indispensable to ensure a sufficiently high level of the richness of work and to meet conditions for preventing the monotony of work by including in the operation at least 10 different work movements whose performance provides for an alternation of loads on different groups of the worker's muscles and a duration of operations of at least 80 seconds...."¹³ But specific recommendations for projecting and creating optimum forms of division of labor and cooperation, for organization and support of the work station and other processes do not always contribute to creating the conditions for the work of the workers to be rich in content.

Normative materials on scientific management are extensively used both by specialists in the organization of work and also by designers of new equipment. In the process of creating technology, designers in the design stage use the materials indicated above to determine the permissible values of the length of production operations, the number of elements in the operation, etc. The absence of an indicator and criteria of the richness of work stands in the way of creating an organization of work with a high degree of richness, and it accounts for the orientation toward merely not exceeding the permissible values of the characteristics of the work process. If conditions are to be ensured, then, for creating equipment with a high level of richness of work for the workers using it, the project planning documentation will have to be improved in the design stage. It is advisable to use for that purpose an indicator of the richness of work in normative documents and to make recommendations aimed at improvement of its characteristics: complexity and diversity of the work process, the worker's independence.

The indicator of the richness of work, expressed in points, is not being proposed for use as a direct indicator in the design or selection of a version of technology or a version of the organization of work, but for purposes of

comparing them with respect to the level of the richness of work and with a view to selecting that which is richer in content. The indicator of the richness of work can be used in guaranteeing comparability of the technological and organizational variants of its level. In our opinion Yu. Zykov is wrong when he suggests that it is not possible to achieve comparability of technological variants with respect to the content of work.¹⁴

It would seem indispensable to detail more thoroughly that recommendations aimed at improvement of the characteristics of the richness of work and also to make new recommendations that would promote optimalization of workers' independence. For instance, in projecting the operation-by-operation form of the division of labor it is advisable to pay more attention to shaping the operations of the work cycle and to determination of its optimum length from the standpoint of technical, economic and social requirements. The shaping of production operations requires thorough analysis of the entire set of operations in the technological process. In order to increase the richness of work it is sometimes possible to do away with intermediate and inspection operations, and to consolidate some of them. The richness of work will be increased provided there is a varying level of complexity of operations in the work cycle.¹⁵

In intersector and sectorwide NOT requirements note should be taken of the advisability of taking into account the level of the worker's independence when technological systems are being designed and the organization of work is being projected.

Designing and selecting optimum forms of interrelations in the work process has great importance to ensuring a high level of the richness of work, including the worker's independence. The types of worker interrelationship usually taken into account in projecting collective work processes are vertical and horizontal. The type of interrelationship is determined on the basis of the technological process. A vertical interrelationship takes place when the products of one worker's labor are subjects of another worker's labor. As a rule the vertical relationship occurs when equipment is narrowly specialized and on assembly lines. Horizontal relations occur when the equipment is less specialized and "arise as a result of performance of several partial processes at one and the same work stations."¹⁶ Greater autonomy is afforded by horizontal relationships.

For example, the individual organization of work is a principal form of the organization of work in a section structured on the technological principle (specialization of a particular type of operation). Particularly great importance is being attributed at the present time to collective forms of the organization of work.¹⁷ When individual organization of work is the pattern, there are horizontal relations between workers which characterize the relative independence of the workers from other operatives. The level of synchronization of the work of the particular operative is lower in the individual organization of work than under the conditions of the assembly-line organization of work. We should note that in the work team it becomes possible to vary the work and to improve the skill of the workers. The horizontal relations and diverse makeup of the production operations (the machine tool operator manages

the technological process, adjusts the equipment, changes the tools, makes minor repairs, inspects and regulates the quality of the product) determine the worker's independence, which is characterized by moderate departures from the prescribed work process.

When production is organized on the basis of the assembly line, and interrelations in the work process are vertical, there are practically no departures from the prescribed work process. The absence of opportunities to vary the parameters of the technological process results in low worker independence.

Thus in designing technology and in organizing production, and that includes the organization of work, a contradiction can arise. On the one hand it is more expedient for designers to strive to develop vertical relations, which makes it possible to make better use of the principle of the continuity of production and reduces the possibility of disruption of technological connections. As is well known, the latter can detract from product quality or cause the technological process to break down. On the other hand "vertical relations" may in the designing of technological processes contribute to greater rigidity of the relationship between the worker and the technological process and detract from the level of the worker's independence, and consequently from the richness of work. That is why designing optimum interrelations in the work process is in our view an important task of those who design the technological process and who project the organization of production.

An essential prerequisite for increasing the level of richness of workers' work is to improve normative documentation on scientific management toward the end of comparability of technological and organizational variants and to work out its criteria more thoroughly. If those designing the technological process and organizing production carry out the recommendations indicated above, this would be an effective measure that would contribute directly to making work richer. As is well known, the state of the elements of the organization of work determining its richness is predetermined by the technology. That is why even in the stage of designing and selecting technological alternatives one of the fundamental factors might be creating an optimum structure of the process of the worker's work from the standpoint of guaranteeing the necessary technical-and-economic indicators and a high level of the richness of work. Designers of technical systems, since they are not specialists in the organization of work, could encounter difficulties in building a model of the optimum structure of the work process so that it could be taken into account in the design stage. The following measures might be proposed in this connection in our opinion: first, to create conditions so that designers of new equipment can expand their knowledge concerning organization of workers' work; second, assign the task of building the model indicated above to specialists in organization of work of client enterprises.

The recommendations of specialists on creation of the structure of the work process so as to afford a high level of the richness of work can be expressed in the request or application of the client plant which serves as the initial document in designing equipment. In our opinion it would be advisable to note new tendencies in the organization of work, in particular the need to reduce the level of programming of the work process and interrelationships among

workers. One of the principal ways of raising the level of richness of workers' work is to take its characteristics into account in the design stage.

FOOTNOTES

1. "Materialy XXVI s"yezda KPSS" [Materials of the 26th CPSU Congress], Moscow, 1981, p 31.
2. Ibid., p 57.
3. Oblonskaya, I. Ya., and Karpukhin, D. N., "Changes in the Character, Content and Conditions of Work in the Stage of Advanced Socialism," report, Moscow, 1978, p 7.
4. "Klassifikatsiya usloviy truda dlya ustanovleniya l'got i kompensatsiy" [Classification of Working Conditions for Purposes of Assigning Benefits and Compensation], Moscow, 1966; Aseyev, V. G., "Preodoleniya monotonnosti truda v promyshlennosti," Moscow, 1974, p 66.
5. Petrochenko, P. F., "Vliyaniye nauchno-tekhnicheskogo progressa na soderzhaniye i organizatsiyu truda" [Impact of Scientific-Technical Progress on the Content and Organization of Work], Moscow, 1975, p 13.
6. "Rabochiy klass v usloviyakh nauchno-tekhnicheskoy revolyutsii," Moscow, 1979, p 91.
7. "Metodika (osnovnyye polozheniya) opredeleniya ekonomicheskoy effektivnosti ispol'zovaniya v narodnom khozyaystve novoy tekhniki, izobreteniy i ratsionalizatorskikh predlozheniy" [Method (Basic Principles) of Determining the Economic Efficiency of Use in the National Economy of New Equipment, Inventions and Efficiency Proposals], Moscow, 1977.
8. Gatovskiy, L., "Socioeconomic Efficiency of New Technology," VOPROSY EKONOMIKI, No 1, 1980, pp 27-38; Zykov, Yu., "The Socioeconomic Benefit of New Technology From the Standpoint of the National Economy," VOPROSY EKONOMIKI, No 12, 1979, pp 24-34; Slavin, M., "Sanitary-Hygiene Factors of New Technology," VOPROSY EKONOMIKI, No 5, 1979, pp 58-66; Kyl'bovskaya, N., "Evaluation of the Social Results of Scientific-Technical Progress," VOPROSY EKONOMIKI, No 6, 1980, pp 56-63.
9. "Socioeconomic Efficiency of New Technology," VOPROSY EKONOMIKI, No 7, 1980, pp 155-156.
10. Ibid., p 155.
11. For more detail see "Sotsialisticheskoye sorevnovaniye. Voprosy teorii i praktiki organizatsii" [Socialist Competition. Problems in Organization Theory and Practice], Moscow, 1973, pp 187-188.

12. "Mezhotraslevyye trebovaniya i normativnyye materialy po nauchnoy organizatsii truda, kotoryye dolzhny uchityvat'sya pri proyektirovanii novykh i rekonstruktsii deystvuyushchikh predpriyatiy, razrabotke tekhnologicheskikh protsessov i oborudovaniya" [Intersector Requirements and Normative Materials on Scientific Organization of Work Which Are To Be Taken Into Account in Designing New Construction and Reconstruction of Enterprises and in Developing Technological Processes and Equipment], Vol 1, Moscow, 1976, p 2.
13. Ibid., Vol 2, p 14.
14. Zikov, Yu., op. cit., pp 24-34.
15. For more detail see Aseyev, V. G., op. cit., pp 166-181.
16. Zudina, L. N., Kolobov, A. D., et al., "Proyektirovaniye organizatsii truda na predpriyatii" [Designing the Organization of Work at an Enterprise], Novosibirsk, 1977, p 20.
17. "On Improving Planning and Strengthening the Influence of the Economic Mechanism on Increasing Production Efficiency and the Quality of Work," decree of the CPSU Central Committee and USSR Council of Ministers dated 12 July 1979, Moscow, 1979, p 59.

COPYRIGHT: Izdatel'stvo Moskovskogo universiteta, "Vestnik Moskovskogo universiteta", 1982

7045

CSO: 1828/6

LABOR

PROFESSIONALS COMMENT ON RETIREE EMPLOYMENT PROBLEMS

Work of Retirees Discussed

Moscow SOVETSKAYA ROSSIYA in Russian 23 Oct 82 p 2

[Article: "The Main Advantage: Specialists Comment on Readers' Letters on the Work of Veterans"--Article by A. Chapaykin: "Don't Hurry Into Retirement"; see JPRS 81354, 23 July 1982, No 58 of this series pp 66-69]

[Text] On March 16 and April 10 of this year SOVETSKAYA ROSSIYA printed articles of the retired worker L. Bugrov "The Third Is Not Unnecessary" and the economist of the USSR Gosplan A. Chapaykin "Don't Hurry Into Retirement". The questions touched on in these articles called forth a large amount of lively mail from readers. A part of the responses were published in the paper. And although quite a bit of time has elapsed, the letters continue to come. The greater part of them are communications and reflections of elderly people who have received the right to a pension on account of age, but who continue to work in production in the sphere of service--about how much satisfaction they experience from the fact that they live a valuable and active life, recognize themselves to be needed people as before, useful to society and to the country; with what desire they pass on experience and professional mastery to young workers.

A part of the letters, however, show that not all questions have been finally settled, at the local level they at times do not know well-operating provisions; their violation creates obstacles to the full utilization of the considerable potential of the guard to the working class, the experience of the veterans, and their aspiration to lead an active and energetic way of life.

The editors invited the authors of the articles published in the paper, A. Chapaykin (USSR Gosplan), the worker L. Bugrov, as well as the economists A. Solov'yev (USSR State Committee for Labor and Social Problems), G. Simonenko (AUCCTU), Professor M. Sonin (Institute of Economics of the USSR Academy of Sciences), and A. Nsanov (Krasnogorsk Mechanical Plant).

Production is still in great need of retirees who are able to work, but not in all enterprises have normal conditions for their work been created. In the ar-

ticle "Don't Hurry Into Retirement", there is a discussion of the advantages of measures to stimulate the work of pensioners. I would like to know, are there relevant decrees in regard to this matter, have these advantages and measures been set forth in laws?

Yu. Ditkovskiy

Yeysk.

In connection with letters of such content, and there are quite a few of them, it must first of all be remembered that three years ago, in September 1979, a decree of the CPSU Central Committee and the USSR Council of Ministers was published "On Measures Concerning the Material Stimulation of the Work of Retirees in the National Economy." In it are clearly stated what rights and advantages they enjoy and what obligations the administration has with respect to them.

But here is what we must think about: Why are explanations requested three years later?

A. I. Chapaykin made the following observations:

The indicated decree is one of the most extensive measures taken by the Central Committee of the party and the government with respect to the utilization and organization of the labor of retirees; it provided effective means of attracting to work elderly people who are able to work. The letters to the editors show that at the local level and in many enterprises it is far from being fully realized, it still is not operating the way it was planned and as it is necessary.

Frequently the following picture can be observed. A worker, let us say, turns 60 years and they send him warmly and triumphantly to his deserved rest, but they do not even ask whether he wants to rest or whether, perhaps, he would stay at his former place of work with a full or somewhat smaller load. And tomorrow they throw themselves into a search for his replacement, they find one with difficulty. But the novice must still be trained and prepared, and then he will not all at once come up with a high output. Why was there such a hurry with the retirement? And this in conditions of an acute shortage of manpower!

One can also hear the following: Does it pay, they say, in general to attract retirees, is there an economic basis for this? What should one say apropos of this? So much has already been written and said about the deficit of manpower resources that there is no sense in repeating it, everyone knows: People are needed, all the more--highly-skilled workers. The economics here are very simple: During one hour of work in material production an individual, according to average calculations--provides production for 2 rubles and 25 copecks. Millions of retirees are working. The effect, without a doubt, is enormous. Who gave us the right to scorn them?

Frequently the administration deprives the working retiree of the advantages which are provided for in the indicated decree, only because it does not trouble itself with the problems and the solution of the organizational questions that arise in such cases.

G. S. Simonenko recalled: Already in October 1979 the AUCCTU adopted a decision concerning the tasks of the trade unions in the fulfillment of the decree of the CPSU Central Committee and the USSR Council of Ministers. They must conduct explanatory work, control the execution of the existing provisions, and in every conceivable way contribute to the improvement of the organization of the work of retirees.

The trade unions must assume control as well of the granting of the advantages provided by legislation to retirees who work. It must be noted that this control is as yet inadequate. At the present time, the AUCCTU leadership is developing recommendations for the purpose of activating the work of trade union organizations in this direction. The improvement of the working conditions of elderly people must, in particular, find reflection in the collective agreements as well.

Lately many highly-qualified workers have been leaving enterprises for the following reason: They frequently work better than young people, but they may not receive the same wages, otherwise their pension will be lowered. To talk about an increase in labor productivity in such cases is pointless. It is necessary at last to come to grips with this "ceiling".

M. Truskov

Kislovodsk.

In commenting on letters apropos of this, the participants in the discussion expressed the following opinions:

L. N. Bugrov:

I have already written and take the view now that the wage limitation for retirees or the so-called "ceiling" constitute an obstacle to initiative and serve as a hindrance to competition. Moreover, it is a pity that it is, above all, highly-skilled people who suffer from it. Turn your attention to the following aspect of the matter as well. The wage limit for retirees was established more than 10 years ago, since that time the wage level for all has increased, but with respect to the veterans everything, as it were, has come to a standstill.

They say, then, give up your pension and work with the same high productivity. But, you see, the state has already designated a pension for me. . . Indeed, by so doing it "prohibited" me from being of use to society in a way I can still be of use.

And still another point. One can make the transition to an incomplete work week or to an incomplete work day. Many in production in our country have gone over to such a regime. But it is one thing when a person goes over to this because it is difficult for him to carry the former load, it is another matter if the limitations connected with the same limit force him into this.

Among the readers' letters there are those which subject us, the working retirees, to reproaches: Don't you want too much!... Really, ~~and~~ what you have now a little? Agreed, quite a lot; and for three hundred rubles everyone of us lives comfortably. But is this the only point at issue! We have calculated: Alone

because of the fact that a part of the retirees who could work on the same level with all, but are employed only three-four days a week, production lost 1,200 man-days a year. The plant director says: This is a blow according to plan. . . And in his view he is also right. It is interesting what the scientists think.

Professor M. Ya. Sonin:

There are two points of view concerning this question. The first: A pension is not a benefit, not a philanthropic "assistance", or a free loan. It is a payment of labor extended in time which is spent during the period preceding retirement. And the wages of a retiree today are payment for his work today. If we proceed from this point of departure, then the pension designated by law for an elderly person must be preserved, and if he still continues to work, his wages must correspond to the volume and quality of work.

But there is also another point of view: If an elderly person wanted to work in order to avoid the consequences of forced inactivity, let him, they say, work without receiving a pension. And the interest of society in his work and the measures of its stimulation are called forth only by the deficit of labor resources. (If it did not exist, it is useless, really, to stimulate. . .). In this case, the payment of a pension in addition to the wages is regarded as an advantage for which the state is forced to find additional means.

It is also thought that with age the labor productivity of an individual declines. That is so, of course, but by far not always, and frequently this is not confirmed. This is what a study indicates that was undertaken in Leningrad: Men aged 60 and older, using machine-tools, produce an output of 147 percent, and young workers (17-20 years old) no more than 95 percent. From this it is apparent that the highly-skilled cadres of veterans are of great value for industry.

Interesting are also the following results of the study: Absences from work due to illness amounted to 7.1 days for people of retirement age, but among those who were younger--11.1 days a year.

Among the elderly workers, moreover, there are fewer other losses of labor time than among the young since they are more accurate and disciplined.

A. G. Solov'yev:

The problem is not as simple as it seems at first glance. There is no doubt that the labor of the retiree is a blessing in all respects: From a personal and from a social point of view.

But briefly about the economic aspect of the matter. Mikhail Yakovlevich Sonin said that the pension is, as it were, a payment for labor extended in time which is expended by the individual during the pre-retirement period. I subscribe to another point of view. In the form of pensions, the state expends that part of public consumption funds that is designated for people who are not able to work.

What sense is there in the fact that the state nevertheless pays out pensions to the same elderly people who are working? The sense lies in the fact that is a system of material incentive, it has been created under the influence of a deficit of manpower resources. From these perspectives the questions of payments are also decided.

At the present time approximately 8 million pensioners (by age) are working in the national economy. By what is their interest determined? Only by the fact that their pension is being paid? If it were not paid, millions would leave? No.

If we are talking about the employment of retirees in the national economy, then we, in my view, would attain the optimum situation when new incentive measures will hardly increase the number of working elderly people. If there are still reserves for attracting retirees into the production or service sectors, not so much new material incentives as the creation of such conditions, such work regimens, as are suitable for people of this age, will be of help in using them.

Of course, the existing system of incentive is not free from shortcomings, it must be improved. We are constantly analyzing the situation in the country; measures are also being taken for the creation of more favorable conditions for working retirees.

The chief economist of the Krasnogorsk plant, A. M. Nsanov:

Let us examine the question using our enterprise as the example.

We have a shortage of about 500 machine-tool operators, metal-workers and fitters, galvanizers and heat-treaters, but the sources for replacing them are exceedingly limited. In our plant 470 retirees are working, the majority of them highly-skilled specialists. They carry out the most responsible operations in the mechanical and finishing furnaces, in the final assembling. As far as is possible, we create for them favorable working and living conditions (a special waiting line for veterans for the improvement of housing conditions, additional leave without maintenance and other measures of moral and material incentive). In the department of cadres there is a special commission, an inspector for the work with retirees. And all of this in order to keep them in production. However, it is difficult to keep them. The thing is that they have little material interest in this. The explanation is simple. The average monthly wage of highly-skilled workers is 200-210 rubles, and together with the bonuses from the material incentive fund and payments of long-service bonuses--260-270 rubles. To work intensely and productively is disadvantageous. The aspiration to do this disappears even in the most conscientious and skilled worker. This is where the whole paradox lies! The better he works, setting an example for others, the more he makes a contribution to the success of the collective, the greater will be. . . the deduction from his pension. And it is not only a matter of money. In this situation the veteran, an individual of merit, experiences humiliation: His experience, efforts and endeavors, as it were, are of no use to anyone, they are as if condemned, instead of being valued for their merits. No matter what you say, that is abnormal. And it is no coincidence that the majority of retirees, who are fully capable of working, are leaving

the machine-tool and the most responsible sections. And where? To become guards and storekeepers. What sense is there in these circumstances to talk about the fact that we need to value experience and skill of cadres.

I do not want to enter into arguments, but I am talking about how all of this looks and to what it leads in practice, in life. In short, we must search for and find a solution of the problem that has arisen. In my view it is worth thinking about whether the "ceiling" should not be raised, even if only for the leading professions with the greatest deficit. Other variants are also possible. But it is clear that life is posing this problem. The institutions that must find its solution have fallen behind in this. We, the people in production, are expecting help in this respect from both the State Committee for Labor and Social Problems and from the AUCCTU.

As far as the reserve is concerned which consists of the veterans who have received the right to a pension but are able to work quite a bit without harm to their health, it is far from being exhausted in my view. People are leaving, you know, and not because they cannot or do not want to work, but because there are other reasons and obstacles for this. I do not take it upon myself to judge in general, but on the basis of the example of our enterprise, reserves do exist, and they are worth attention.

From the Editors: The discussion of the letters to the editors makes it possible to draw some conclusions.

It is perfectly clear that the established operative provisions concerning the incentives for the work of retirees are not utilized fully at the local level in many cases. Indeed, such conditions as those in the Krasnogorsk plant have by far not been created in all enterprises within the limits of the existing possibilities. And even the fact that the editors constantly keep receiving letters with questions which, it would seem, were answered long ago, confirms this.

The mail received by the editors and its discussion make it clear that there are still unresolved problems.

It appears that much, in effect, depends on the trade union organizations at the local level. Years come and go, pensions come and go, but the veterans of labor, their rights and interests must always be in the field of attention of the plant and local committees of the trade unions.

They must, first of all, investigate how the decrees of the CPSU Central Committee and the USSR Council of Ministers on the material incentives for the work of retirees in the national economy are carried out in enterprises and organizations. And all necessary measures must be adopted with respect to those who allow its violation.

The veterans, their knowledge, ability and possibilities can serve people, the enterprise and the country even more fully.

Minister Discusses Retiree Employment

Moscow PRAVDA in Russian 18 Oct 82 p 3

[Article by M. Kazyev, minister of social security AzSSR: "A Match for the Veterans: Problems and Judgments"]

[Text] "He left for his deserved rest"--we say with respect about the person who, having attained retirement age, made use of the right granted to him. But often this decision conceals reflections and emotional experiences that are not simple. Many veterans do not think of themselves as outside the collective, they are full of desire to go on working. It is important to help them in this aspiration, to attract on a wide scale the retirees who are able to work for feasible work in all sectors of the national economy. These problems were already raised by PRAVDA in the socio-economic review "They Remain in Construction" (1 June 1981) and in other articles. There is a need, it appears, to continue the discussion.

Practice shows that retired production workers, who for reasons of health need to find work "on the side", find the most accessible and useful application of their forces in enterprises of trade and municipal and everyday services. Of course, we try to make use of the possibilities of the retirees, taking into account the great shortage of cadres in the service sector. But we are firmly convinced that the given problem must be solved not so much by means of attracting someone from other sectors, as through better incentives for the veterans still working here.

I shall cite an example. According to our calculations, during the coming 5 years about 19,000 workers, masters and specialists of trade, public catering, housing-municipal and everyday services of the republic will attain retirement age. If we extend their work activity by only 5-7 years, having created for this the appropriate conditions, then we will preserve thousands of already prepared specialists. Having invited an additional 1 percent of the non-working retirees from other enterprises, we will fully meet the demand for cadres in the service sphere.

It goes without saying that the rational organization of the work of veterans in all the other sectors of the national economy of Azerbaijan demands no less attention. As is apparent from the same calculations, by the end of the five-year-plan approximately 6,000 skilled workers, engineering and technical workers and employees in the oil-extracting, oil-processing and petro-chemical industry will reach the retirement "limit", as well as 7,500--in machine-building and metal-processing, about 10,000--in the light and food industry, more than 23,000 --in agriculture, 19,000--in the sphere of public health, culture and education. Let us add that every tenth of them--with a higher and secondary education. Every year the proportion of experienced specialists, masters and workers with high qualifications among the retirees increases.

This is precisely the very intellectual potential which must be dealt with in the most economical manner, as was noted by comrade L. I. Brezhnev at the grand session in Tashkent, which was dedicated to the awarding of the Order of Lenin to the UzSSR.

Indeed, why is it necessary first of all to transfer those into the category of retirees who have attained such an age and then seek to "arrange work for them"? You know, at times one encounters what are really paradoxical facts, when without any special hesitation they send a highly-qualified specialist into retirement and then for a long time search for a replacement for him "on the side".

Here, let us say, some 25 years ago advantages were established in some industries for early retirement. At that time this was a necessary measure since a number of factories and types of work were acknowledged as hard and harmful. However, life does not stand still. Thanks to the introduction of progressive technology and the improvement of working conditions, many factors which formerly had a negative influence on the health of people have now been fully or partly eliminated, which has been conducive to a sharp reduction in the sick-rate in these industries, and that means to a prolongation in the work capacity of the people. But here is what is surprising: During the past year, in the presence of an acute shortage of personnel, 510 skilled workers were sent into retirement here, with a light heart, as they say. And, you know, it would have been worthwhile to pay greater attention to them, to talk with each one of them, for sure many of them would have continued working. Of course, we are not talking about forcing anyone among the specialists of retirement age to keep on working, but about the necessity of treating the experience and knowledge accumulated by them carefully and economically.

Today every second retiree in the republic continues to work. At the same time, the reserves for the wider involvement of them in public production are still great--almost 80,000 individuals under age 65 are not working. A sample survey showed: Many of them were inclined to remain at their former place of work even after the granting of a pension, but at the same time every fifth of them was unable to realize his desire since appeals to the administration of the enterprises and institutions did not meet with the requisite attention. Two out of five who expressed their desire to work were not assured in their possibilities and needed a qualified medical-social consultation and assistance in the selection of work open to them with their state of health. They were unable to obtain such a consultation.

And, in effect, nobody properly dealt with such a problem, we had to entrust these functions partially to the medical commissions for determination of disability of the organs of social security although according to the provisions now in effect and according to the staff possibilities they conduct consultation service only for invalids. The medical commission for determination of disability must turn its fact toward production. And in this we have been successful to a certain degree. In five years the number of trips by physicians to enterprises, construction sites, kolkhozes and sovkhoses has increased by a factor of almost 8, every second session of the commission is held at the local level with the participation of the physicians of the medical and disease-preventing institutions. In five years the number of those who have availed themselves of work consultation has increased fourfold. As a result, during the past year we succeeded in involving about 12,000 veterans in public production and rational work assignments.

For the best solution of these problems, the medical commissions for determination of disability need the help of the scientific method, literature, precise

instructions and recommendations. They do not exist. The existing instructions orient the physicians of the medical commissions for determination of disability, as a rule, only with respect to the determination of the level of lost work ability and almost fail to touch on questions of the assessment of the potential possibilities of an individual.

The scientific development of these problems, in our view, could be taken up by the Central, the Leningrad and the Dnepropetrovsk scientific research institutes for the expertise and organization of the labor of invalids. But methodology alone is not the point. A solution should also be found through legislative procedure to the question of a significant expansion of the functions and obligations of the medical commissions for determination of disability, having included specialists for medical-social and labor rehabilitation in the composition of these commissions. They could be charged with the examination and the determination of optimal recommendations for the rational work arrangements not only of invalids, but also of veterans who have a need for this for reasons of health.

The system of material incentives for the working retirees also needs further improvement. The thing is that the increment for work after the attainment of retirement age introduced in 1979 for some categories of workers does not produce the requisite effect. And here is why: At the present time another right is operating in a parallel fashion--the right to receive a pension and a full wage simultaneously. True, in so doing, you lose the increment to the pension (it amounts to 40 rubles) when you reach age 65. But many reason as follows: It is better to have one and the other for five years in real terms than to earn an increased pension in the future. In the interest of the matter it would be expedient to establish a single system of "deferred" pensions, which would be significantly increased after leaving work for those who want to work after reaching retirement age, without any assistance. If veterans by reason of health are compelled to take up another type of work that is less well paid, they can be paid a pension in an amount so that, together with the wages, it does not exceed the sum from which it is calculated.

It appears that the solution of the problems touched on will be conducive to the broader attraction of veterans to work activity.

8970

CSO: 1828/24

LABOR

WORKER PARTICIPATION IN SOCIALIST SOCIETY VIEWED

Moscow EKONOMICHESKIYE NAUKI in Russian No 10, Oct 82 pp 55-61

[Article by N. Krayeva, candidate of economic sciences: "Labor Activity in a Socialist Society"]

[Text] Recently researchers have been increasingly interested in studying problems of labor activity. But in spite of the extensive utilization of this concept, there is no common opinion about its interpretation.

In works devoted to questions of reproduction of the labor force and when conducting a demographic analysis of the problems of the population, labor activity usually acts as an accounting and statistical category or simply a calculation indicator of the level of occupation of various contingents in total labor, and also the degree to which one group of able bodied population or another is enlisted in public production. Sometimes labor activity is equated with employment in the sphere of the economy. In this sense they frequently use such terms as "economic" and "demographic" activity. Individual aspects of labor activity are mentioned when studying processes of the emergence of labor as a demand, the formation of a new type of worker and the formation of a communist attitude toward labor. Here, as a rule, they are speaking about the labor of activity of workers who are already employed in public production and about the qualitative aspect of their labor participation, that is, another group of issues is already being analyzed. In these cases it is typical to use such terms as "production," "social-labor," "socio-political," "social," "creative" activity and so forth.

In international symposia devoted to problems of the development of labor activity they emphasize the need for conducting research on a broad group of problems in this area.¹ This research presupposes, in particular, the solution to the questions of the very concepts of the "category" of staff on which they can base their research.

Labor activity, which is determined by the conditions of the socio-economic development of socialism, reflects the relations among associated members of society with respect to fuller realization of their capabilities of working and participating deliberately, with initiative in coordinated activity in order to achieve the final goal of socialism. It characterizes the formation of labor resources from the standpoint of enlisting able bodied population in public production and the degree of the activity of workers in labor as well as the strengthening of the labor basis in the process of direct participation

in the socialist economy. Revealing many aspects of the participation of workers in economic life, labor activity includes the totality of kinds and forms of manifestation that have, on the one hand, complex (frequently contradictory) dependencies, and, on the other, a certain aspect of isolation and heterogeneity. This is predictable because of the multifaceted nature of the phenomenon.

Under socialism labor activity is based on the general participation of bearers of the labor force in the total labor which presupposes, as we know, granting the opportunity to each able bodied person to participate, in keeping with his capabilities, knowledge and skills, taking into account the society's requirements, in any sphere of activity that is recognized as socially useful. High labor activity is a qualitative feature that is inherent in the socialist system of management and is determined by the complete employment of the capable population in socially useful labor.

The universality of labor and the development of the entire system of material and moral incentives for labor, and the increased significance of the latter (from the standpoint of both the society and the individual) under the conditions of the stable high rates of expanded reproduction in their totality exert a decisive influence on the formation of labor activity under socialism. A major feature and a basic distinguishing characteristic of this is the objective tendency toward constant growth.

Labor activity is also formed as a result of the interactions of a number of factors that are inherent in the specific stage of development of the socialist society. Increased labor activity, being a pattern in the development of socialism, is determined by the large qualitative transformations in the system of productive forces and production relations.

Steady expansion of the scope of all public production and its improvement under the conditions of accelerated scientific-technical and social progress create objective prerequisites for solving a comprehensive problem in the area of labor activity: achieving complete employment of the able bodied population by providing working positions, significantly expanding the possibilities of efficient utilization of the capabilities of workers for labor in the national economy, and achieving greater activity in labor. At the same time the development of the basic manifestations of labor activity is an indispensable condition for efficient functioning of the economic mechanism, which is now acquiring primary significance.

More efficient utilization of live labor which functions in the national economy, increasing the total mass of it, and also changing the qualitative characteristics of workers presupposes not only the actual, but also the potential progress in labor activity.

The process under consideration is complicated and multifaceted. The ways and methods of increasing production efficiency are just as varied as they are different in the areas of the development of labor activity and the kinds and forms of it. Increased labor activity is manifested in an increased labor contribution to public production by the total and individual labor force and in its qualitative improvement. Increased labor activity contributes to

more efficient utilization of all sources for augmenting the labor force, fuller realization of the capabilities of labor on the part of direct participants in public production, and also in improvement of the quality of the labor force and all-around development of the individual. At the present time the development of the labor activity of the working population occupies a leading position in the complex of measures for increasing the efficiency of labor and improving the quality of work.

The dynamics of labor activity reflect to a certain degree the efficiency of the functioning of the labor force in public business through such characteristics as the intensiveness of labor resulting from its organization, the utilization of working time, the regularity of production, the placement of personnel, labor discipline and so forth. Being related to the results and the return from labor expenditures in all spheres and branches of the national economy, labor activity is an important component which forms the indicator of the productivity of public labor.

It is also necessary to note the existence of a certain interdependency between labor activity and the processes of distribution and redistribution of the labor force in the branch, regional and other aspects. Labor activity is also closely related to questions of the quality of the labor force, reflecting the corresponding characteristics of its bearers: the degree of preparation of the workers for labor, their occupational and skill level, their dynamics and so forth. High labor activity, which presupposes fuller utilization of labor resources, has as one of its main results the development and improvement of the labor force itself.

Labor activity is to a significant degree an indicator of the level of utilization of the labor force and at the same time it can be relatively completely characterized only as the total system of indicators which, in our opinion, can be presented in the form of two groups of factors: endogenic, which are related to the characteristics of the utilization of working time, and exogenic. The latter include factors that determine, on the one hand, the degree of employment of labor resources in the national economy, and, on the other, the amount of time worked (regular time and overtime, and also a combination of the two and so forth). The distinction between these factors of labor activity can be used for scientific analysis and planning of measures directed toward increasing labor activity.

Labor activity, when regarded from the standpoint of enlisting population in socialist production, reveals the process of the formation of the society's labor resources in each specific stage of socio-economic development. This characterizes the labor participation of various contingents in the socialist economy both in the quantitative and in the qualitative respects. Hence labor activity is an indicator of the level of employment by public labor of the able bodied population (in terms of the number of workers in the public economy or the amount of time worked per one worker). At the same time, as one of the concepts that characterize the formation of labor resources and the efficiency of their utilization, labor activity cannot be limited only to the function of a calculation indicator of the proportion of people of a given sex and age group who are employed in the sphere of the economy. It is

closely related to problems of employment of the able bodied population in other kinds of socially useful activity which are necessary and socially recognized.

In the present stage exogenic factors are not the main ones in providing for increased production, but nonetheless they play a large role in economic development. Therefore a comprehensive analysis of new phenomena in the formation, distribution and utilization of labor resources is undoubtedly crucial. This pertains both to the problem of determining measures and conditions for the participation of various groups of the population and individual people in the total labor, taking into account both the specific features and the needs of public production for a labor force of the necessary quality and the demand for particular working positions on the part of the workers themselves in keeping with their interests.² To grant each person a position for using his labor which would correspond maximally to the requirements for improving his capabilities and his individual inclinations is a guarantee of improving the labor force and contributes to solving the most important economic and social problems.

Increasing labor activity is a process that takes place in certain specific forms, including in such a specific form as additional employment of the population. The latter includes various kinds of additional labor in the national economy both for the corresponding payment (a second occupation, housework), and on a public basis. The development of this form has now become quite important.³

Endogenic factors in labor activity are undoubtedly the main ones since the most significant reserves for increasing labor activity are related precisely to them. A necessary condition for more flexible utilization of these factors is improvement of the entire economic mechanism and the achievement of a progressive branch structure of the national economy, taking regional peculiarities into account. The solution to the problem of improving the entire mechanism for increasing labor activity depends to an ever increasing degree on more productive utilization of the supply of working time of all categories of employed people. As we know, for a number of reasons, regulated duration of working time does not correspond to the actual amount of time worked. Shortcomings in labor organization which cause entire days of idle time as well as idle time between shifts and labor turnover essentially reduce (by 15-25 percent and more) the supply of working time. The fight against labor turnover and the strengthening of labor discipline contribute to eliminating losses of working time and realizing socialist principles of labor organization. Here no small role is played by increasing the activity of public institutes of the enterprises: public personnel divisions, schools of communist labor, bureaus for mentors, and so forth.

The labor activity of each individual worker is characterized by his direct participation in public production at a particular working position, revealing the various manifestations of man as a bearer of the labor force and as an individual who lives under the conditions of socialism. In this sense it cannot be regarded broadly enough, including as a specific form of behavior which reflects the direct attitude toward labor in general and toward a

specific kind of labor, which is traced through the entire system of motives and stimuli for labor activity. A large role is played by the dependency between labor activity and the process of development of public labor itself, this decisive sphere of man's activity, of his emergence and perfection as an individual. In this connection one should note that the proportion of people who do not consider labor the main sphere for affirming their individuality, according to materials from various investigations, does not exceed 10-12 percent of the corresponding groups that were investigated.⁴

The development of labor activity is conditioned to a large degree by the correspondence between the selected labor activity and the capabilities and demands of one person or another. F. Engles noted: ". . . since each individuum has an inclination or a passion to a particular kind of labor, the totality of these individual inclinations as a whole should form a force that is capable of satisfying the needs of the entire society."⁵

The labor activity of the worker is characterized by the diversity of its specific manifestations which are directed primarily toward the achievement of higher production indicators. One can include among them primarily the desire to fulfill and overfulfill planned assignments, established norms and job obligations. Especially promising in this connection is expansion of the labor functions of the workers, the assimilation of related specialties, the combination of occupations and positions, larger service zones, the mastery of advanced methods and devices of labor, the surmounting of occupational restrictions, and the extension of collective forms of labor organization. But the development of labor activity in a given direction is not limited to this, which is shown by the expansion of the scope of the movement of workers for prompt revision of existing norms and normatives in the direction of improving them. As we know, the development of branch and interbranch normatives for scientific organization of labor is being carried out in practically all spheres of the economy, presuming the need for fuller accounting for labor time and the total volume of expenditures of public labor. At the same time the introduction of progressive, technically substantiated norms on the initiative of the workers themselves is frequently impeded because of a number of circumstances. Therefore it is very important to create the corresponding sytem of stimulation of the indicated manifestation of labor activity on the part of the workers, particularly following the example of the leading enterprises of Vladimir and Rostov Oblasts and the collective of the Aksay plastics plant.⁶

The labor activity of a worker can be traced in the degree of utilization of each hour that is worked. The reserves that exist here are great enough. Putting them to work involves, to a significant degree, strengthening labor disciplines, control over the observance of the rules for internal placement (through which it is possible to reduce losses of working time by 10-15 percent), and revision and improvement of working conditions. Increasing the scope of multishift work by dividing shifts and creating special brigades that are employed under privileged conditions and utilizing various kinds of sliding schedules that make it possible to change the time periods of shifts and working hours, taking into account the individual desires of the people and the possibilities of production, will produce a significant effect. Thus just regulating working conditions and more extensively applying graduated

schedules for arrival times at work, taking their expediency into account, can increase the efficiency of the utilization of the labor force by no less than 5-10 percent and improve the quality of work.

Systematic improvement of conditions and protection of labor and the provision of economic organizations with modern means of safety and industrial sanitation occupy an important place. Each year more than 120,000 measures are introduced to improve working conditions. Approximately one-fourth of the expenditures on implementing plans for scientific organization of labor go for these. These expenditures are recouped in an average of 3 years.⁷ At the same time it is obvious that these expenditures should be increased further.⁸ It is also necessary to accelerate the introduction of standard plans for the organization of working positions which reduce losses of working time between shifts by an amount of up to 70 percent and increase labor productivity by 5-12 percent.⁹

The quantity and quality of labor that is expended depend on the conditions for its application and the unification of the efforts of the workers in the process of production activity within the framework of individual collectives of workers. The possibility of developing creative activity occupies an important place here. The latter is, in our opinion, an important part of labor activity which characterizes the worker's attitude toward his labor in a particular section. Creative activity is activity that is directed toward introducing into the process of labor new, previously unutilized elements, which are reflected in the increased number of efficiency proposals and inventions, increased production efficiency as a result of this, and so forth.¹⁰ For example, under the 10th Five-Year Plan more than 16 million inventions and efficiency proposals were introduced into the national economy, as a result of which we saved 22.1 billion rubles, that is, 2.5 billion rubles more than under the 9th Five-Year Plan.¹¹

High labor activity, as a typical feature of the socialist way of life, presupposes an aware, creative attitude toward labor, stronger discipline and initiative on the part of the workers, their increased responsibility for the preservation and more productive utilization of equipment, economical use of raw and processed materials, the struggle for high quality of work that is performed and products that are produced as well as reduced labor-intensiveness, and other progressive changes. Gradual introduction of creative labor into the process of the development of productive forces and improvement in production relations are accompanied not only by a change in one's attitude toward labor, but also by an increase in its intellectual content, an increase in the proportion of mental functions and a reduction in the proportion of physical efforts.

Further development of socialist competition plays no small role in the development of labor activity. At the present time, according to data of the AUCCTU, approximately 92 percent of the employed population in the USSR are participating in socialist competition. The significance of this form of realizing labor activity, which is primarily directed toward increasing the productivity of public labor and is characterized by a whole number of specific phenomena, is constantly increasing and being enriched by the diversity of its functions. But, as was pointed out at the 26th CPSU Congress, there are still some problems that have not been fully resolved in this area (it is necessary

to surmount the existing perfunctoriness, the directive nature of socialist commitments and so forth).¹²

When speaking of the growing labor activity one cannot but emphasize the need for a differentiated approach to the possibilities of its manifestation in various workers who have certain individual socio-economic, demographic and psychological characteristics. Here we have in mind the occupational and skill level, the specialty, the overall labor tenure and the tenure of work in a given specialty at a given enterprise, age, sex, health condition, family situation, living conditions, job satisfaction, possibilities of professional growth, and place of residence. A large role in the totality of determinants under consideration is played by the material situation of the worker and his family. The development of public production and increased labor activity of the population are becoming increasingly closely related to improved well-being of each individual.

In addition to accounting in all ways for the factors enumerated above one should keep in mind the existence of the corresponding prerequisites for comprehensive stimulation of labor activity within the framework of a specific production collective. The worker's personal contribution to public labor is determined to a significant degree by the creation of the necessary creative atmosphere, a favorable socio-psychological climate, and the development of a system of moral incentives for members of the collective which make it possible to fully apply their ability to work, to achieve high personal results and to provide for general production successes. Increased labor activity depends on the development of labor initiatives and undertakings on the part of the worker, and their adoption of private and collective counterplans which integrate and intercoordinate the positive results of work that are achieved.

A special form of manifestation of labor activity is expansion of the scope of the participation of workers in production administration and improvement of the most effective varieties of this (workers' meetings, conferences, activists, permanent production and scientific and technical conferences; people's control groups and posts; councils of innovators, mentors and young specialists, public personnel divisions, various bureaus and so forth).

The issues we have considered are far from a full list of the problems of labor activity, each of which is the subject of many independent investigations. The work that has been undertaken is essentially only a first attempt to overcome a certain narrowness in the interpretation of labor activity and comprehensive analysis of various aspects of the process of increasing it. The complexity of this problem is obvious. In this connection the statement of the problem of the need for developing a special theory of labor activity as an indispensable part of the overall problem of scientifically substantiated prediction of social transformations is of a certain amount of interest¹³ (in our opinion, one should speak of this in a broader sense--socio-economic transformations). Regulation of the process of stepping up labor activity and the direction that is necessary for the society in keeping with the interests of the workers themselves presupposes conducting comprehensive research on a broad group of issues related to the formation and further improvement of the most progressive tendencies in the area of labor activity.

FOOTNOTES

1. See: Voyeykov, M., "Socio-economic Problems in the Development of Labor Activity," VOPROSY EKONOMIKI, 1982, No 2, p 150.
2. See, for example: Kostakov, V. G., "Prognoz zanyatosti naseleniya" [Prediction of the Employment of the Population], Moscow, 1979, pp 9-13, 19-20, 80-95.
3. For more detail, see: NARODONASELENIYE, Moscow, 1978, Iss. 21, pp 75-85.
4. See: "Sotsialisticheskoye sorevnovaniye. Voprosy teorii i praktiki organizatsii" [Socialist Competition. Questions of the Theory and Practice of Its Organization], Moscow, 1978, p 65.
5. Marx, K., Engels, F., "Soch." [Works], 2d ed., Vol 1, p 528.
6. During 6 years at this plant more than 1,000 workers increased output norms, and the savings on the wage fund amounted to more than 320,000 rubles. Half of this sum was paid to the workers as additional one-time bonuses, which contributed to increasing the output of products by 3.5 million rubles. On the whole labor productivity increased annually by an average of 29.5 percent (see: "Sotsial'nyye faktory povysheniya effektivnosti truda" [Social Factors in Increasing Labor Productivity], Leningrad, 1981, p 88).
7. See: Manevich, Ye. L., "Voprosy truda v SSSR" [Labor Questions in the USSR], Moscow, 1980, p 49.
8. In particular, according to the materials of a number of research projects, the proportion of industrial workers released because of unsatisfactory working conditions amounts to up to 20 percent of the overall number of workers who are released at their own request.
9. See Sbytova, L. S., "Struktura zanyatosti i effektivnost' proizvodstva" [The Structure of Employment and Production Efficiency], Moscow, 1982, p 121.
10. See: PLANOVOYE KHOZYAYSTVO, 1978, No 12, p 39.
11. See: "Sistema upravleniya trudom v razvitom sotsialisticheskom obshchestve" [The System for Control of Labor in a Developed Socialist Society], Moscow, 1980, p 331.
12. See "Materialy XXVI s"yezda KPSS" [Materials of the 26th CPSU Congress], Moscow, 1981, p 58.
13. See: Nugayev, M. A., "Trudovaya aktivnost' rabochego klassa razvitoogo sotsialisticheskogo obshchestva" [The Labor Activity of the Working Class of a Developed Socialist Society], Kazan', 1975, pp 31-32 and others.

COPYRIGHT: Izdatel'stvo "Vysshaya shkola", "Ekonomicheskiye nauki", 1982

END OF

FICHE

DATE FILMED

10 Jan 83 TB